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MEDICINE and SURGERY

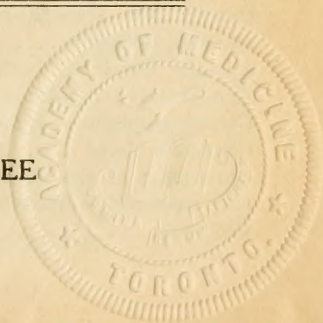
C. S. BRIGGS, A.M., M.D.

EDITOR and PROPRIETOR

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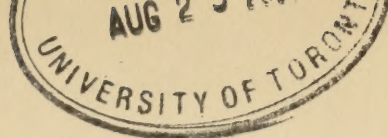
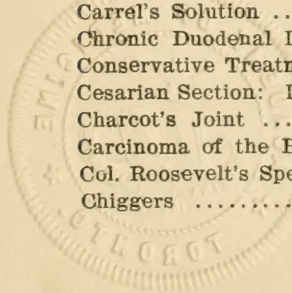


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CHARLES S. BRIGGS, A.M., M.D., Editor.
W. T. BRIGGS, B.A., M.D., Associate Editor.

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Original Communications

IS PROHIBITION A PRACTICAL MEDICO-LEGAL QUESTION?

BY T. D. CROTHERS, M.D., HARTFORD, CONN.*

It would seem almost useless to defend this resolution or to stop and question its practical application to the solution of the impending question. Yet strangely enough there are divergent opinions no matter what the motive may be. There are persons who strenuously oppose taking the alcoholic question into politics and making it an issue at the polls. They seem to overlook the great national method of settling questions from the beginning of the American Republic, as well as dread, the voice of the people when registered in a formal legitimate way. They overlook the great question that such a measure is not in deciding on the merit or demerit and its practical character, but is simply an opportunity to express individual opinions on the question. Every

*This is a part of an opening address delivered before the N. Y. Medico-Legal Society by T. D. Crothers, M.D., President, on the question, "Shall prohibition be submitted to a legal test at the polls and the results of such test be formulated in laws and restrictions for the people?"

legislative body in all the states should most willingly pass measures to submit the question to the voters. Then, if they are opposed to the enactment of any restrictive measures, settle it by a vote of the people. These are questions that should be undisputed. Every professional man should favor measures of this kind as the first and most important step to solve the problem which is pressed upon public opinion.

During the past year some very startling changes have occurred. Public opinion is clearly moving towards a complete abolition of all sale of spirits as a beverage, and this sentiment is rapidly taking form and shape in laws and restrictive measures, which show evolution as well as revolution. What is supposed to be a mere fad and sentiment is coming to be a reality, which must be recognized, and oppositions and denials will only give it more force and power. Among the innumerable reasons which call for a discussion and settlement of this question are the startling conclusions which come from a scientific study of alcohol, showing that the theories of the past have been mistaken. The supposed value of alcohol as a stimulant, tonic or food, is false in every particular. The effects of its use so fascinating has been that of an anesthetic and depressant, covering up pain and fatigue symptoms. When examined in the light of scientific studies all the previous theories of its value and usefulness proved to be just the opposite, and no agent at present, excepting the poison of syphilis, produces more injuries and is more prominently responsible for insanity, crime, pauperism, epilepsy, feeble mindedness and degeneration, than alcohol. This is not dependent on scientific studies alone, but is supported by actual experience and studies of the causes of the evils and conditions of life. In these modern times, theories of causes and conditions must bear the test of actual examination and critical study. They are not accepted on the face value which evidences call for. Theories and dogmas from the past have no value unless sustained by the experience of the present. In the commercial world, where every man is rated according to his physical and mental output and capacity to do the work assigned to him, it is found that the use of alcohol very seriously lowers his capacity; even in so-called moderation, he is more incapable than

the total abstainer, where exact services is called for in all departments. Actual experience shows that any use of alcohol diminishes this output of labor and mentality. Thus, a business depending on the integrity and vigor of the persons doing it, has an increasing peril in the use of alcohol for any purpose. This is the result of experience and not theory. To such persons, prohibition is the only question to be considered. Examples are seen in the railroads and large corporations, employing men for responsible positions. The life insurance companies furnish most startling evidence of the increased mortality from risks in which there is no question except that the insured uses spirits in certain very limited quantities. Statistical studies show that this risk is a dangerous one and can be stated in exact figures and measured with certainty. In the great questions of preventive medicine, which every health board is confronted with, alcohol looms up as a most prominent cause, either directly or indirectly. This furnishes another reason for some different means and measures of prevention, and suggests prohibition as the only possible alternative. In financial circles, mercantile agencies, bonding companies, banking interests, call for total abstainers and look with suspicion on anything less than this. All these are facts outside of the waves of sentiment that has built up great societies, church organizations and moral movements. Physicians and professional men, generally hesitate about endorsing the enthusiastic waves of public opinion based on sentiment and theories, hence, do not often lead these movements as they should, but outside of all sentiment there has come to the surface a prohibition movement which can not be mistaken and which is going to call for the highest judgment and discretion of every one in the near future. It has passed the empiric stage and has come now for that of actual discussion of facts and their meaning. The alcohol problem, meaning by that the degenerations, diseases and mortality that come from it, associated with it and is a part of its existence, has come into the horizon in such a way that it must be recognized and acted upon as another impending evil to civilization. In twenty-three different states of the Union the sale of spirits is abolished by law, and in every other state there is tremendous pressure growing steadily

to enact similar laws. It would seem to be the highest wisdom of our legislators to submit the question to the people at once and have a general educational movement addressed to the voters. The facts are numerous and accumulating constantly which, if understood by the common people, would be quickly acted upon. These facts appeal to the personal interest of so many people. They touch every home and fireside and affect so many divergent interests as to arouse inquiry and call for exact knowledge. It is very evident that this last great wave of public opinion is going on to the extent of total abolition of the use of alcohol as a beverage. The manufacturer and dealer will be practically driven out and alcohol will be put to new uses. Already there are intimations of this, in the laboratory, and most startling results, confirmatory of previous opinions in local experiences in different sections of the country. An army of exact workers are determining with the exactness of a surveyor, the damage which comes from the use of alcohol as a beverage and an increasing army of physicians are verifying this in many ways and looking out with wonder and amazement at the future. A few very special observers have noted a distinct range of causes farther back than alcohol, and, a research hospital has been founded at Hartford to take up this subject and point out conditions that call for the anesthesia of alcohol and drugs. This is another great forward movement to show that there is no element of chance or accident in the things we deplore at present. It is simply cause and effect and the highest kind of scientific studies must concentrate on the study of the causes and the removal of these. It would seem from a mere casual outlook that no kind of legislation is more important today than that of submitting the prohibition question to the people. It really rises above all parties and questions of reformers, pro-alcoholics and critical of every kind. Here is a reality that we must meet. It is a personal interest to do so. It is more than a personal interest, for it is a duty for us to be acquainted with the facts and in some way show how they can be put to service. There is a French saying—very significant—that the subject is in the air, meaning that consciously or unconsciously, it is here to be settled. It is a practical Medico-Legal question

both generally and technically. A moment's reflection will show how far it affects the health and vitality of the race, and how far it concerns the legal relations and how thoroughly practical it is in all its application to every-day life. Up until a comparatively recent time, the discussion of this question has been along moral and sentimental lines and the real issues have been obscure. Now all this has been changed. It is a duty we owe to ourselves and to others to take up the whole problem, to call upon the medical man in every community to supply the facts and educate the people how to vote wisely on a matter so dear to their own interests. Our society has long recognized this last revolution and evolution in practical life and earnestly urges that the people be prepared to vote on the question. Whatever the submission vote may result in it is a movement to the larger and better understanding of the subject. It is only by agitation of this kind that we can emerge from the delusions of the past into the larger and more exact knowledge of the future.

Extracts from Home and Foreign Journals

SURGICAL

THE FRENCH TREATMENT OF BURNS.

The daily press and certain medical reports from the European fighting front have frequently mentioned new and successful treatment of burns by French surgeons. Since the special dressing was known by a coined word and since its composition was not definitely stated, the profession has been awaiting an official description. In the first place it is not very new, since its employment goes back to 1904. It has been in use in the present war almost from the outset, but has only recently come into anything like general employment. It consists of a mixture of paraffin and resin, and while no chemical change is set up it possesses peculiar physical properties which make it available for the treatment of burns.

In the *Archives de medecine et de pharmacie militaires* for August Dr. Barthe de Sanfort reported 300 burns in soldiers treated with the remedy, which is described in detail. The name "ambrine," with which it was christened, comes from its amber hue, and seems to be purely descriptive. This surgeon states that he first devised the formula in 1904. Toussaint used it in 1907 in the military hospital at Lille, while another colleague, Michaux, has also had long experience with it. Recently Kirmisson presented some patients before the Societe de Chirurgie in which the remarkably favorable action was well demonstrated.

The substance is a solid which fuses at about 50° C. and may be sterilized by boiling without injury. It is applied hot (at 70° C.—158° F.), causing no pain whatever, and even after 24 hours is still warmer than the body. The favorable action is due in part to local hyperthermia. Occurring as it does in cakes of paraffin consistency it is broken up into bits of various size, heated to 125° C. (257° F.) and then cooled to 70° C. (158° F.), the

temperature of application. Its use is not confined to burns for it is excellent in freezes and is even superior in the treatment of certain wounds. It is first applied in very small quantities with formation of a thin pellicle. Over this is placed a very thin layer of cotton, which is followed by more of the remedy. This simple dressing is painless and inexpensive. It is removed in twenty-four hours and comes away *en masse* and without pain. It is true that considerable pus often of foul odor, is found beneath. This, together with loose sloughs, is carefully wiped off and the surface dried with a hot air douche. The dressing is then reapplied. In no type of burn is it contraindicated. In general, rapid healing takes place with superior end results.—*Medical Record*.

IS THE GALL BLADDER USELESS?

This vesicle acts as a bulb to further the passage of bile, regulating the pressure and serving as a reservoir. When the gall bladder is removed the common duct is dilated and in a way becomes a compensatory bladder. Experiments on dogs showed that the duct became dilated and even bulbous after cholecystectomy. Gall stones after cholecystectomy are frequent. For these and other reasons, protest is made against looking on the gall bladder as in the same class with the vermiform appendix and as unnecessary. Cholecystectomy is often mandatory, but not necessarily the operation of choice in all gall bladder and duct disturbances. The gall bladder is not a functionless organ and its removal should be undertaken only for reason, or, as the author puts it, "for truly great surgery is conservative, and radical only when unredeemable pathological lesions force her hand to summary action."—*Interstate Medical Journal*.

IS LAUDABLE PUS LAUDABLE?

It is not so long ago, remarks the *Medical Record*, that we used to speak much of laudable pus, not so long ago in the history of medicine, that is. Those of us who are young in years—we are

all young in spirit—remember our professor of surgery saying during one of his first lectures something like this, “Formerly it was not believed that a wound was healing properly unless a quantity of typical creamy pus was present. This was called ‘laudable pus,’ because it was thought that it was really beneficial. Now we know that for a wound to heal in an ideal manner there should be no pus whatever.” As a matter of fact, the old-time doctors were not so far off after all. This kind of pus to which they referred was usually a staphylococcus infection, had little tendency to spread, and showed an active resistance of the tissues to the infective organism. So that while as a purely academic proposition it may be conceded that the ideal wound is a pusless wound, still in actual practice it is sometimes better to let the pus alone.

Of this opinion are Drs. Donaldson, Alment and Wright, who published a report in the *British Medical Journal* for August 26th. These doctors entered upon their military practice firm in the belief that pus has no place in the modern surgeon’s scheme of things; experience taught them that in many cases the pus should be left alone, and the patient would get along the better for it. There did not seem to be any delay in healing, the patient’s general condition remained good, and his pulse and temperature stayed down. The patients themselves were put in a more cheerful frame of mind by doing away with frequent, painful dressings, and the tissues were allowed to remain in a state of rest, most favorable for healing. There is, to be sure, an esthetic objection in the odor arising from the seldom-dressed septic-case, but this would seem to yield in importance to other considerations.—*Medical Brief*.

THE TREATMENT OF HEMORRHOIDS BY A NEW METHOD.

Dr. Louis J. Hirschman, of Detroit, Mich., read a paper before the late meeting of the American Proctologic Society in which he presented a simple, safe and efficient method of curing selected cases of hemorrhoids by the injection of quinine and urea solution. During the past two years 127 patients have been treated by this method with only one recognized failure. Injection of quinine

and urea in solutions of from 5% to 20% strength produces starvation and atrophy of the hemorrhoids. The series reported includes only uncomplicated internal hemorrhoids. The results of the treatment of 127 patients justify the conclusion that the method is simple, safe and effective in properly selected cases.—*Practical Medicine*.

FRACTURES ABOUT THE WRIST IN CHILDHOOD AND ADOLESCENCE.

Burnham (*Annals of Surgery*, September, 1916) from a study of fractures about the wrist in adolescence and childhood concludes that typical Colles fracture is very uncommon before early adult life. In childhood (that is, before the tenth or twelfth year) the common type of fracture about the wrist is fractures of both radius and ulna, either greenstick or complete.

Separation of the lower radial epiphysis is of frequent occurrence during the early part of the second decade and should be carefully differentiated from dislocation of the wrist, which is so rare as to be a surgical curiosity.

When fracture of the radius is suspected, either in childhood or adolescence, the line of fracture should be reached for at a point considerably higher than is the case when the same injury occurs late in life.

In the case of fracture of the lower end of the radius in early life the frequency of the associated fracture of the ulna must be constantly borne in mind, the treatment of the condition being modified accordingly.—*The Therapeutic Gazette*.

TREATMENT OF BOILS (FERUNCULOSIS).

The "abortive" treatment of boils is recommended by Jackson. He moistens a toothpick in pure carbolic acid and bores it into the center of the furuncle, or a few drops of carbolic may be injected with a syringe.

As furuncles vary in their duration and as some do not come to a head at all ("blind boils") the expectant course of treatment

is that recommended by many. An incipient boil should never be toyed with. If left alone it *may* resolve, if handled it is always sure to develop. As the furuncle forms, the surrounding skin should be dry shaved and each boil covered with an individual *small* piece of soap salicylic plaster. The latter should be changed as soon as any discharge collects underneath it—say three times a day at first, then every 3 or 4 hours as the core breaks down—the parts being wiped dry with ether or benzine before each new application. By this means the breaking down process is hastened and the production of new boils prevented.

Incisions should *not* be made in the case of ordinary furuncles as they simply become infected wounds and are sure to leave scars.

In chronic furunculosis, diabetes or some other serious constitutional disturbance should be suspected. In these cases the best results are obtained from the injection of autogenous vaccines. The organism (*staphylococcus aureus*) can readily be recovered from the pus by smearing the latter on any ordinary culture tube (a diphtheria tube does very well). The vaccine should be prepared by a competent bacteriologist. The dosage is determined by the reaction, a week between injections being the ordinary interval. If an autogenous vaccine can not be prepared a stock vaccine of mixed strains may also give good results.—*The Medical Critic and Guide*.

THE HAND SIGN IN SYPHILIS.

Posadas for the last three years has been noticing very often in his syphilitic patients, with or without treatment, a pinkish spot in the hypothenar region of the palm. There is evidently a special dilatation of the capillaries in the skin of this region on both hands. It forms a triangle with the base line running from the middle of the inner half of the first fold on flexing the root of the hand, to the middle of the ulnar edge of the hand. The inner side of the triangle runs from the middle of the ulnar edge of the hand to the digitopalmar folds corresponding to the little finger. The triangle thus occupies the hypothenar region but there may be merely a round spot instead of a triangle. The skin may look

pinkish or resemble a scarlatinal eruption or even a vascular nevus, but the redness never extended beyond the outline of the triangle described above. He found this hand sign in 321 of 493 syphilitics examined, that is, in over 65 per cent, but never earlier than the third year after infection. Omitting the patients with infection of more recent date, he found this sign pronounced in nearly 81 per cent of 397 patients. Specific treatment renders it more intense for the time being and then it returns to its former aspect. —*The Journal of the Am. Med. Asso.*

MEDICAL

CODDLING OF CHILDREN AND THE INFECTIOUSNESS OF COLDS.

The crusade now being undertaken against tuberculosis has clearly brought to the minds of every one that the only intelligent treatment of the disease is by means of fresh, pure air, and a good diet. In all parts of the world, sanitariums, conducted on those principles, are springing up, and even in England where one would think that the climate was hardly suitable for the out-of-door treatment, the system is being carried out on a large scale. But, after all, it should be remembered if proper care is taken of children, when young, and if their bringing up is carried out more with the view of hardening them, and thus rendering them proof against the ubiquitous microbe, the need of sanitariums would be much less than is at present the case. It is a fact, both instructive and pertinent, that in many of the coldest portions of the globe, colds are unknown. Nansen and his men, when in the Arctic regions, although they underwent exposure of every description, never once suffered from colds, but no sooner had they set foot on their native shore of Norway, than they, one and all, caught severe colds. The experience of other Arctic explorers is the same. It seems then, probable, that there may be something in the theory of the infectiousness of colds, and that we shall have to give up our traditional belief to the contrary, however much

we may have treasured it. If the infection theory be the true one, and if it be frankly accepted, a radical change in the method of treating colds must necessarily follow. If exposure is not the direct cause, but merely acts by so lowering the vitality that the germs can gain an easy foothold, the radical treatment must be to build up and harden the constitution in such a manner that it will refuse to harbor the seeds of disease. Mothers and nurses are too much afraid of fresh air and ventilation, but when they understand that the hot house plan of rearing children will produce a nation of weakly, delicate individuals, susceptible to every complaint that is about, they will doubtless see the error of their ways.—*Pediatrics*.

THE PHARMACOLOGY OF EMETINE.

Pellini and Wallace in the *American Journal of the Medical Sciences* for September, 1916, state that from their experience they wish to emphasize the following points:

1. Emetine depresses and may eventually paralyze the heart.
2. It is a powerful gastrointestinal irritant whether given by mouth or subcutaneous injection.
3. It causes a definite derangement of metabolism, characterized by an increase in nitrogen loss and an acidosis.
4. While in normal individuals given moderate doses these actions may not be of importance, in pathological states of the circulation, intestinal tract, or metabolism, they may be of a very definite source of danger.—*The Therapeutic Gazette*.

TO RELIEVE PAIN IN INCIPIENT ALVEOLAR ABSCESS OR IN NEURALGIA.

Sometimes the pain is vague along one side of the jaw and not easily located. If it is found impossible to decide on any one tooth as the seat of the trouble, the pain may frequently be relieved by taking some menthol crystals, about the quantity that would lie on a dime, and placing them in half a teaspoonful of water and holding the spoon over the gas till the crystals are melted down in the

liquid. Dip some cotton in the melted menthol and pack this between the cheek and gum on the affected side. The menthol will sooth the pain and frequently relieve it entirely. This is also an excellent remedy for clearing out the head and facilitating the breathing where the nasal passages are stopped up with cold. In this case pack the saturated cotton under the upper lip. It will be found a great relief.—*Practical Medicine.*

A CURE FOR ENURESIS.

As a unique cure for enuresis, Dr. Harmon suggests that if the mother hire the child to retain his urine for a given time each day, two, three, or four hours, gradually increasing the time limit, that the capacity of the bladder is increased, the strength of the cut-off muscle is developed, the sensitiveness is increased, and a cure is the result.—*Practical Medicine.*

MYOCARDIAL EFFICIENCY.

Strickland Goodall in the British Medical Journal bases his conclusions on the study of 2,000 observations made on healthy and diseased hearts during the past five years. The measure of a heart's efficiency is its capacity for doing work, whether one is dealing with a healthy or diseased heart. The physiological heart of a healthy young adult responds to increased work by increased contraction—increased rate, blood pressure, and respirations. In the diseased heart in which the myocardium is at all impaired the response to work is not by increased contraction, but by dilatation, so that, although the frequency is increased (often out of all proportion to the amount of exercise taken) the blood pressure fails to rise or actually falls, according to the amount of damage present in the heart and the amount of work done. The writer tested these statements by the following methods: the simple stair test, the exerciser test, the inclined plane test, and the progressive exercise reaction. These various exercises have all been found beneficial in many cases of myocardial disease and when carried out quietly,

systematically, and over sufficient length of time protects the sick heart by estimating its limitation of power to work.—*The Medical Brief*.

THE FAUCIAL TONSILS IN SINGERS.

Irving W. Voorhees has made a determined attempt to obtain from over a hundred physicians reports as to the effects they have found were produced by tonsillectomies in singers. From knowledge thus obtained and his own experience he draws the following conclusions: 1. An analysis of 5,000 tonsil operations in singers shows that in the hands of skilled operators there need be no special fear of bad results. 2. It is the consensus that bad results are most often due to cicatricial contractions occurring from careless dissection or from neglected after-treatment. 3. Pain in the tonsillar region, neck, and larynx, is probably due to section of some of the larger branches of the glossopharyngeal nerve (Justus Matthews). 4. Loss of singing voice after tonsillectomy might be due to a nerve lesion, but is probably due to adhesions and cicatricial formations in the fauces. 5. Loss of singing voice occurs very rarely after tonsillectomy. Impaired voice is impossible, but most cases show an increased range of from one-half to a full tone. 6. The singers problem is a very special one and no laryngologist should undertake to operate on these patients unless he has some knowledge of the art of singing. 7. At operation the greatest care and skill must be exercised in securing a clean, free dissection. Injury to the tissues surrounding the tonsil may prove disastrous. 8. Postoperative care is of special importance. The patient should be seen daily until full healing occurs.—*Medical Record*.

SUBCUTANEOUS ADMINISTRATION OF FRESH HUMAN BLOOD

For several years Holm has injected fresh human blood subcutaneously under various conditions and for different diseases, with apparent benefit. In a case of pernicious anemia, under frequent subcutaneous administration, he has seen the blood picture go from 30 per cent hemoglobin to 85 per cent, and the red blood

cells rise from 1,500,000 to over 4,000,000 in the course of a few months. He says that a fairly large amount of blood (4 to 8 oz. or more) may safely be injected into the subcutaneous tissues, and perfect absorption take place, if ordinary aseptic technic be employed. Blood which apparently is toxic to the patient when used intravenously may be injected subcutaneously without causing any undue reaction, and with apparent benefit. Holm describes the technic he has used in hemorrhage of the newborn, hemorrhage of gastric ulcer, splenomyeloid of the newborn, hemorrhage of gastric ulcer, splenomyeloid leukamia and in pernicious anemia.—*The Journal of the Am. Med. Asso.*

PREVENTIVE SUN CURE.

Every day one or more groups of from twenty to thirty children gather at a certain spot in their quarter where a guide and assistant meet them and conduct the party to the banks of a lake not far from town. Here they spend the afternoon in games and gymnastic exercises, clothed only in bathing trunks. The aim is to apply Rollier's system of heliotherapy as perfectly in the limited time afforded as is possible, and the work is all modeled on that in his institution. It was organized a year ago by Dr. L. Jeanneret for the more delicate schoolchildren of the city of Basel, and it has proved successful beyond all anticipations. He advertised for helpers in the papers, asking young men or young women to give up one afternoon in each two weeks to a group of frail children to help make them robust. Reflection from the lake doubles or triples the effect of the sunlight. There were only five days during the entire summer in which the trips could not be made on account of the weather. A group of children too small to take the half-hour walk were provided with a sanded and fenced space for the purpose in one of the public parks in town. A regular system was followed each day, the walk to the lake, then rest or quiet games, then gymnastics and games of all kinds. Efforts are made to train the children in good habits of breathing. The chest diameter of the two hundred children increased by 2.03 cm. on an average between July 14 and September 4, and the av-

erage increase in weight was 825 gm. Only four children failed to show this increase. The entire expense from May to October was about twenty-one dollars. When cold weather came, the children had their walk and the games, Saturdays, but they did not remove their clothing. Jeanneret urges that gymnastic exercises in schools should be taken with the trunk bare and in the open air when possible.—*La cure de soleil preventive*, L. Jeanneret, *Revue Med. de la Suisse Rom.*, April, XXXXVI, 1916.

OBSTETRICAL

PITUITARY EXTRACT IN OBSTETRICAL PRACTICE.

In *American Medicine* for August, 1916, Perry reports his experience with pituitrin. He states that labor pains were induced in from three to five minutes, generally intermittent at first, but became regular in about fifteen minutes. The contraction never exhibited the character of spasmodic pain, and he observed no case of tetanus uteri in his series. There were no symptoms in either mother or child to show any untoward effect of the injected drug.

Delivery of the child is hastened and expulsion of the placenta is accelerated. The uterus firmly contracts, thereby preventing postpartum hemorrhage, clot formation in the uterus, and loss of blood.

An agreeable after-effect of the remedy is its favorable influence on the evacuation of the bladder; hence its value in cases of puerperal ischuria.

The foregoing are all desirable after-effects, together with the apparent more rapid recovery after the hardships of labor, and point to the fact that pituitrin is proving an indispensable remedy in obstetrical practice. It can be given without danger to mother or child, keeping in mind the contraindications of anatomical obstruction in the birth canal, a too narrow pelvis, nephritis with a high blood-pressure, and exophthalmic goitre.

Perry would be inclined to give it late in the second stage in a case whose history would lead him to anticipate secondary hemorrhage.

Lastly, he would advise against the too early use of pituitrin. The cervix should be well dilated and rigidity overcome before its administration; any possible dangers may be thus avoided.—*The Therapeutic Gazette*.

THE HIGH FORCEPS APPLICATION.

There still remains a relic of bad practice in the fact that the attempt is sometimes made to deliver the unengaged head by forceps. While this may rarely be successful, it often fails, and the unsuccessful attempt frequently leaves the patient wounded and infected. It is difficult to eradicate from the mind of the general profession the belief that one need not wait for engagement and molding for the successful application of forceps; but, until this is abandoned, there will remain from this source a considerable maternal and fetal mortality and morbidity.—*The Journal of the American Medical Association*.

OPERATION FOR RETRODISPLACEMENTS OF UTERUS.

In the method described by Battey the round ligament is caught in a pair of forceps at a point which, when drawn up, seems to take up the laxity, and made taut. With a needle threaded with fine linen the proximal and distal ends are stitched together. This gives us a loop of the round ligament. A second and third stitch one-half inch apart toward the end of the loop are introduced through both sides of the ligament and tied, the third stitch being left long. With a pair of curved forceps the internal ring is entered and the peritoneal investment of the round ligament is dissected downward and the peritoneum is punctured at a point as near as possible to the first stitch in the ligament. The linen stitch left long is caught in forceps and the ligament is pulled through the artificial opening. With No. 1 chromic catgut the ligament is sutured to the under surface of fascia of the rectus

by interrupted sutures. The operation is, in a measure, extraperitoneal, and the author says there is no likelihood of an intestinal obstruction taking place.—*The Journal of the Amer. Med. Asso.*

BIOLOGIC DIAGNOSIS OF PREGNANCY.

In this preliminary communication Deluca calls attention to what he calls the urine-hemolytic reaction as a sign of pregnancy. Tests with pig complement showed that addition of urine from a pregnant woman hastened hemolysis by five or ten minutes. Urine from men and from nonpregnant women had the opposite effect, retarding hemolysis. The pregnant urine lyses the red corpuscles even without the hemolytic amboceptor, but it took several hours for this. The presence of complement is indispensable. The findings were constant in the thirty pregnant women examined, in the second to the ninth month of the pregnancy. In one woman the hemolytic reaction was pronounced although six weeks had passed since an abortion at two months.—*The Journal of the American Medical Association.*

NONPROTEIN NITROGEN AND UREA IN MATERNAL AND FETAL BLOOD.

As nearly as possible the specimens examined by Slemmons and Morris were obtained simultaneously at the end of the second stage of labor. The fetal blood was collected from the placental end of the severed umbilical cord which lead into a sterile flask; the maternal blood was aspirated from a vein in the mother's forearm. In thirty-five normal obstetric patients at the time of birth the average rest nitrogen in the maternal blood was 25.2 mg. per 100 c.c. (extremes 18.5 to 33.5 mg.); in the fetal blood the average was 24.9 mg. (extremes 19 to 34.2 m.). In sixteen normal patients the average quantity of urea nitrogen in the maternal blood was 10.5 mg. per 100 c.c. (extremes 8.4 to 14 mg.); in the fetal blood the average was 10.4 mg. (extremes 7.9 to 13.5 mg.). The urea nitrogen represented 44 per cent of the rest nitrogen in the maternal and 45 per cent in the fetal blood. The same con-

centration of urea in both circulations indicates that this substance passes through the placenta by diffusion. Complications accompanied by an increase of urea in the maternal blood—toxemias of pregnancy, syphilitic, decompensated heart lesions, and others—are also attended with a corresponding increase in the fetal blood urea. Pathologic cases thus confirm the conclusion that urea diffuses through the placenta. The administration of chloroform during pregnancy causes alterations first in the fetal and later in the maternal blood. Primarily the fetal blood urea is increased. Prolonged anesthesia causes a moderate increase in the rest nitrogen of both circulations. Asphyxia dependent on impairment of the fetal-heart action is attended with a notable increase in the urea of the fetal blood. In cases of still birth this generally represents 60 to 85 per cent of the rest nitrogen.—*The Journal of the Am. Med. Asso.*

PREGNANCY TOXEMIA.

Williamson in *American Medicine* for June, 1916, reaches these conclusions:

1. In cases of pregnancy toxemia chloroform should never be administered, because the action of chloroform is to render more grave the lesions which already exist and increase the acidosis. Ether administered by the open method is in every way preferable as an anesthetic.

2. Calomel should not be used as an aperient, for the lesions in the liver and kidneys produced by mercurial poisoning are of the same nature as those of pregnancy toxemia, and it is probable that mercury even in small doses will increase the gravity of the lesion already existing.

3. For a similar reason douches of mercurial antiseptics should never be employed.

4. In all cases in which acidosis is present intravenous infusion with a solution of sodium bicarbonate or sodium acetate should be practiced.

5. The fat metabolism should be spared as far as possible by the administration of glucose. Williamson's practice has been to

administer it by the rectum when vomiting is present, and to give it by the mouth in the form of glucose lemonade where the digestive functions are not deranged.

6. When a pregnant woman suffering from chronic nephritis shows evidence of the existence of acidosis, the uterine contents should be evacuated without delay, for with kidneys previously damaged the prognosis of pregnancy toxemia is very grave.—*The Therapeutic Gazette*.

TOXEMIA OF PREGNANCY.

The treatment of toxemia of pregnancy by duodenal enema is recommended by McDonald (Med. Rec.) The procedure is as follows: In the first attempt it is better to cocaineize the patient's throat. The tongue is depressed with the forefinger while a small rubber tube (12 F) is thrust down with the other hand, the patient being in the sitting posture. When the tube is down about 22 inches, 8 oz. of a solution of sodium chloride in concentration somewhat stronger than physiologic saline, are injected by means of a syringe through the tube into the stomach. This usually overcomes the tendency to vomit. The tube is then thrust further down to 28 inches. The patient is then placed on her right side in a semiprone position. After a few minutes, suction is made by means of a vacuum bottle and syringe and when bile is obtained it is considered that the tip of the tube has passed the pylorus. This usually takes place within 5 to 7 minutes. The stomach should be empty for several hours before the treatment is given.

An injection is then made by means of a gravity can of a liter of a solution containing from 4 to 6 gm., by measure, of a granular sodium sulphate. This solution has the effect of precipitating itself through the intestines; within thirty minutes of the time the last of the sulphate solution is introduced into the tube the first of it appears at the anus. A single treatment is all that is required. Of twelve patients treated in this manner only one had any recurrence of vomiting.—*Medical Progress*.

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M. D. corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

ANNOUNCEMENT.

As announced in the December number of the Journal, on account of the increased cost of publication we have been forced to reduce the size of the Journal from 48 pages an issue to 32 pages. We regret very much to have been compelled to take this step, but it was a question as to whether it were the wisest course to pursue rather than increase the subscription price. This Journal was established in 1851, sixty-six years ago, and has in all that time maintained the same size and form. We hope, however, to condense and crystallize the reading matter so that our publication will be more useful and practical to its readers than ever before. In all probability the senior editor has been at the helm for a longer period of years than any other living medical editor in the United States, it now being forty-one years since he assumed the editorship of the Journal. The associate editor—Dr. W. T. Briggs—has recently moved to Lexington, Ky., where he will in the future devote himself to a surgical specialty in connection with the distinguished surgeon, Dr. David Barrow of that city. However, he will continue his connection with the Journal as associate editor and will continue to furnish editorial matter and occasional original articles as in the past.

With the increased cost of living and phenomenal advances of prices in everything (except in the matter of doctor's fees) we earnestly ask that subscribers be more prompt in making remittances for past due subscriptions, or at least notify the Journal to

mark off their names as subscribers. This latter may be done with the scratch of a pen and a two-cent postage stamp. We really would regard it as a favor and it would save us a great deal of trouble for those who no longer wish the Journal to write us to that effect. Unless we hear from quite a number of our readers who are in arrears we shall drop them as subscribers from now on. We shall try to fulfill our obligations to our subscribers and think it but fair that they carry out their part of the contract. In this season of stress and high prices we need all the support our friends can extend to us and will be grateful if they can be brought to realize that their indebtedness to the Journal is as real and as binding as their debts for the necessities of life. We extend to our readers the compliments of the season and wish for them all a prosperous and happy New Year.

INCREASE IN PELLAGRA.

That there may be an increase in pellagra during the coming year on account of the rise in the cost of food-stuffs is the fear expressed in a statement issued by the U. S. Public Health Service today. As a result of government researches it was found that pellagra is produced by an insufficient, poorly balanced diet and that it can both be prevented and cured by the use of food containing elements in the proportion required by the body. The application of this knowledge greatly reduced pellagra in 1916 as compared with previous years. This reduction is believed by experts of the Public Health Service to have been due to improved economic conditions which enabled wage earners to provide themselves with a better and more varied diet and to a wider dissemination of the knowledge of how the disease may be prevented. It is feared, however, that pellagra may increase in 1917 by reason of an increase in food cost out of proportion to the prosperity now enjoyed by this country. The great rise in the cost of forage, particularly cotton seed meal and hulls, is causing the people in many localities to sell their cows and thus there is danger that they will deprive themselves of milk, one of the most valuable pellagra preventing foods. The high cost of living has

further served to bring about a reduction in many families in the amount of meat, eggs, beans and peas consumed, all of which are pellagra prophylactics. In effecting economics of this nature the general public should bear in mind the importance of a properly balanced diet and refrain from excluding, if possible, such valuable disease-preventing foods. It is believed that unless this is done there will be a greater incidence of pellegra next spring.

A NEW MEDICAL JOURNAL.

Dr. Philip Skrainka, for some time connected in editorial capacity with the Interstate Medical Journal, has severed his connection with that periodical and will in February start a new medical journal to be known as *Medicine and Surgery*. We wish him every success in his venture.

A CHANGE.

The Louisville Monthly Journal of Medicine and Surgery will, with the January number, become the Mississippi Valley Medical Journal and will be the official organ of the Mississippi Valley Medical Association, the Ohio Valley Medical Association and the Louisville Medico-Chirurgical Society. May it prosper and increase in usefulness!

Dr. J. W. Grisard, of Winchester, Tenn., a well known practitioner of that city, died recently at the age of 68 years.

DEFECTIVE TEETH.

Out of 330,179 school children examined in the city of New York in 1914, 194,207, or 58.8%, suffered from defective teeth. This exceeded the sum total of all the other defects noted by nearly 80,000. Defective teeth impair general health and impede school progress. Disorders of the digestive tract, tuberculosis and various other diseases frequently are preceded by diseased conditions in the mouth. There is a direct relationship between

dental development and mental development, and it is absolutely essential to good work in schools that children's teeth be maintained in a healthy condition. The Public Health Service recommends that a good tooth brush be included in the list of Christmas presents for every American child and that its use be made a part of the daily training. If this recommendation is carried out the United States will have more healthy children this year than last and their chances of growing up into useful, healthy men and women will be increased.

DO YOU KNOW THAT

A little cough often ends in a large coffin?
 Bodily vigor protects against colds?
 Careless sneezing, coughing, spitting, spreads colds?
 Open air exercise cures colds?
 Colds sometimes get well in spite of the excessive use of alcoholic beverages?
 Overheated, air-tight rooms beget colds?
 Neglected colds often forerun pneumonia?
 Persistent, oft repeated colds, indicate bodily weakness?

SYMPOSIUM ON THE MEDICAL PROFESSION.

The symposia which have previously appeared in the pages of the *Medical Review of Reviews*—the *Symposium on Euthanasia*, *Symposium on Sterilization of the Unfit*, *Symposium on Drugs*, and *Symposium on Obstetrical Abnormalities*—were features of interest and value, but the symposium which is to appear in our January issue will be unique. It is a *Symposium on the Medical Profession*, with contributions from distinguished laymen. "What's the matter with the doctor?" is the question that was propounded and replies were received from such men of affairs as Andrew Carnegie, John Wanamaker, Nathan Straus, Theodore N. Vail; from such authors as Jerome K. Jerome, Israel Zangwill, the Princess Troubetskoy, William Dean Howells, Gertrude Atherton, Robert W. Chambers, Alice Hegan Rice, Margaret Deland,

Theodore Dreiser, George W. Cable, Julian Hawthorne, Ellis Parker Butler, Bruno Lessing, Booth Tarkington, George Nennan, Ernest Thompson Seton; from such poets as Edith M. Thomas, Bliss Carman, Rose Hartwick Thorpe, Wallace Irwin, Witter Bynner, John Kendrick Bangs, (these last two contributions being in verse), from such folks of the stage as Minnie Madern Fiske, Wilton Lackaye, James K. Hackett, William C. de Mille, Charles Rann Kennedy, Eugene Walter, John Philip Sousa; from such educators as Andrew D. White, David Starr Jordan, E. Benjamin Andrews, the late Booker T. Washington, Charles F. Thwing; from such inventors as Nikola Tesla and Hudson Maxim; and from editors, politicians, cartoonists, theologians, *et al.*, throughout the world.

Many of these contributions are literary gems from world-famed masters of the pen, and we believe they will be quoted for years to come.

We propose sending out 50,000 copies of this January edition, thus reaching practically half of the Medical profession in America.

ASSISTANT EPIDEMIOLOGIST (MALE), \$2,000—\$2,500.

January 30, 1917.

The United States Civil Service Commission announces an open competitive examination for assistant epidemiologist, for men only. From the register of eligibles resulting from this examination certification will be made to fill vacancies in this position in the Public Health Service, at salaries ranging from \$2,000 to \$2,500 a year, and vacancies as they may occur in positions requiring similar qualifications, unless it is found to be in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion. Certification to fill the higher salaries positions will be made only from those attaining the highest average percentages in the examination.

The duties of this position will be to make epidemiologic and sanitary surveys to determine the prevalence and causation of

disease, to conduct laboratory studies in relation thereto, and to recommend measures to prevent and control outbreaks of disease.

It is desired to secure persons thoroughly competent in the various branches of sanitary bacteriology, and especially in isolating the typhoid bacillus from infected persons and materials.

Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated:

<i>Subjects</i>	<i>Weights</i>
1. General education and medical training-----	25
2. Laboratory experience -----	25
3. Experience in epidemiological work-----	40
4. Publications or thesis-----	10
<hr/>	
Total-----	100

Graduation from a medical school of recognized standing, and at least three years' experience in epidemiological work under Federal, State, or local authorities, and experience in laboratory technique, especially in regard to malaria and typhoid fever, are prerequisites for consideration for this position.

If a thesis is submitted under Subject 4 it must be on some sanitary subject upon which the candidate has done special work.

Statements as to education and experience are accepted subject to verification.

Applicants must have reached their twenty-third but not their fortieth birthday on the date of the examination.

This examination is open to all men who are citizens of the United States and who meet the requirements.

Persons who meet the requirements and desire this examination should at once apply for Form 304 and special form, stating the title of the examination desired, to the United States Civil Service Commission, Washington, D. C.; the Secretary of the United States Civil Service Board, Postoffice, Boston, Mass., Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco, Cal.; Customhouse, New York, N. Y., New Orleans, La., Honolulu, Hawaii; Old Customhouse, St. Louis, Mo.; Administration Building, Balboa Heights,

Canal Zone; or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R. Applications should be properly executed, excluding the medical and county officer's certificates, and must be filed with the Commission at Washington, with the material required, prior to the hour of closing business on January 30, 1917.

Issued December 22, 1916.

Reviews and Book Notices

Annual Report of the Secretary of the Navy for the Fiscal Year (Including Operations and Recommendations to December 1, 1916). 1916. Washington, Government Printing Office, 1916.

Our thanks are due to the Secretary of the Navy for this exceedingly interesting report. It is a full exposition of our nation's resources in its navy, its present strength and its great improvement in the immediate future. The reflex of the great European war is clearly manifested in the great activity in naval circles. A feature of note in this report is the part devoted to Health and Sanitation. It is shown how carefully guarded are the health conditions of young men admitted to the navy. Mortality statistics show that while in civil life eight out of every thousand will die from the ordinary hazards while in 1915 only 4.48 per 1,000 of the naval personnel were lost. The standard requirements for admission have been rigidly maintained. The rigor of the physical examinations is demonstrated by the statement that during the past year 106,392 sought admission to the navy. Of these 30.18 per cent were accepted. This rigidity of physical requirements insures a fine standard of men and at the same time lightens the pension load of the country in future years.

Progressive Medicine, a Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia. Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. Vol. IV, December, 1916. Lea & Febiger, Philadelphia and New York. 1916.

Our thanks are due the obliging publishers for this valuable number of a most excellent quarterly publication. This quarterly stands in a class by itself and the up-to-date physician can ill afford to be without it. It is most ably edited by well known men, and its various departments are conducted by men of world wide

reputation who know how to thresh out the wheat from the chaff and to give the whole kernel from the nut of all medical and surgical facts. When the practitioner reads this quarterly, he realizes that he has the very latest word on all subjects treated of. The subjects disposed of in this volume with their respective contributors are as follows: "Diseases of the Digestive Tract and Allied Organs, the Liver, Pancreas and Peritoneum," by Edward H. Goodman, M.D., Philadelphia; "Diseases of the Kidneys," by J. Harold Austin, M.D., Philadelphia; "Genito-Urinary Diseases," by Charles W. Bonney, Philadelphia; "Surgery of the Extremities, Shock, Anesthesia, Infection, Fractures and Dislocations, and Tumors," by Joseph C. Bloodgood, M.D., Baltimore, Md.; "Practical Therapeutic Referendum," by H. R. M. Landis, Philadelphia; Index. We do not hesitate to recommend this quarterly to all physicians who wish to keep up with the progress of medicine and surgery.

Department of Commerce, Bureau of the Census, Sam L. Rogers, Director, Mortality Statistics, 1914. Fifteenth Annual Report. Washington Printing Office, 1916.

We are in receipt of this important production of the Bureau of the Census of the United States. It will prove of the greatest value to statisticians and sanitarians as well as to the medical profession at large. It is based on transcripts from the records of the registration area which in 1914 had an estimated population of 65,898,295 or 66.8 per cent of the total estimated population of the United States. The number of deaths registered was 808,059, corresponding to a death rate of 13.6 per 1,000 population, the lowest one recorded for the registration area."

Publisher's Department

CHRONIC CONSTIPATION OF INFANTS—ITS PROPHYLAXIS.

Many an infant is constipated, but just naturally "outgrows" it.

This is usually the case where the causative factor is merely the overcrowding of the colon in a small pelvis, for the size of the colon develops as time goes by more slowly than does the rest of the body.

On the other hand, many a chronically constipated infant grows up in his ways into an intractably constipated adult, so that anatomic structure is not the only consideration.

Prophylaxis, therefore, is the thing. Some physicians get the mother to hold the infant over its chamber morning and night immediately after feeding, long before it has mastered the secret of bowel control.

As a measure of prophylactic training in this connection, there is nothing which will help more than Interol. For without cathartic action, it lubricates the fecal mass, soft and plastic, into the sigmoid and rectum, whence its expulsion is a comparatively easy matter, in the absence of congenital defects.

This measure, in conjunction with proper feeding or diet and general hygiene, will help the infant or young child to establish the habit of regular stool so valuable to him in later life.

Sample of INTEROL and literature to physicians only. Van Horn & Sawtell, 15-17 East 40th St., New York City.

TONICS PREFERABLE TO STIMULANTS.

In selecting a tonic it is highly desirable not to mistake stimulation for tonic action. Stimulation means unduly exciting the higher nerve centers, suddenly and often excessively elevating the blood pressure, and providing a quick but evanescent effect which rapidly passes away and is many times more harmful than

beneficial. Tonic action means the gradual restoration of functional efficiency—"helping the body to help itself." Thus, Gray's Glycerine Tonic Comp. is a true tonic, with all the advantages and none of the drawbacks of a stimulant. To state it tersely, "Gray's" is an aid and a support to body functions—a genuine prop—not merely a spur or lash.

Chemical Food is a mixture of Phosphoric Acid and Phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., incorporated, to whose advertisements in this issue we refer our readers, have placed upon the market a much improved form of this compound, *Robinson's Phosphoric Elixir*." Its superiority consists in its uniform composition and high degree of palatability.

"I used the samples of Tongaline Liquid and Tongaline and Lithia Tablets for my wife, who was suffering from a severe attack of the grippe, with such success that she made a prompt and thorough recovery."

"I am pleased to inform you that I have had wonderful success with Tongaline during our epidemic of grippe here in Boston."

INCREASES THE PHYSIOLOGIC EFFICIENCY OF THE STOMACH.

In no way is better shown the trend of modern medicine to revive and reinforce—rather than to supersede—the natural physiologic forces of the body, than in the present day treatment of functional diseases. Only a short time ago there was one routine combination that was applied with almost religious fidelity in each and every case of stomach trouble, and that was pepsin and dilute hydrochloric acid. Fortunately an awakening came, and instead of supplying an artificial digestant, the practice today is to use measures that encourage the stomach to do its own work.

Among the therapeutic agents that have been found particularly effective in this respect, Seng easily stands at the forefront. Under its use the gastro-intestinal glands are stimulated, fermentation is promptly controlled, and the distress and discomfort that make the life of the average dyspeptic so miserable, rapidly disappear. And because these results are directly due to the power of Seng to increase the physiologic efficiency of the stomach, they are not temporary and fleeting; on the contrary, the benefits that Seng produces are prolonged, and with removal of causative conditions, the improvement obtained is as permanent as it is pronounced.

It is not difficult therefore to understand the place Seng has won in the regard of many a physician as the remedy of choice in all atonic forms of indigestion.

NASHVILLE JOURNAL

— OF —

MEDICINE AND SURGERY

CHARLES S. BRIGGS, A.M., M.D., Editor.

W. T. BRIGGS, B.A., M.D., Associate Editor.

Vol. CXI.

FEBRUARY, 1917.

No. 2

Original Communications

THE PHENOLSULPHONEPHTHALEIN TEST AND ITS APPLICATION TO SURGICAL DISEASES OF THE KIDNEY.

HOWARD S. JECK, PH.B., M.D.

Surgeon to the Cornell Clinic, Department of Urology,
New York.

It is indeed surprising to note the number of men engaged in the general practice of medicine who are either wholly unfamiliar with the phenolsulphonephthalein test for kidney function or who, having only a passing acquaintance with the test, do not regard it as being of any particular value whatever. There are even some, in fact, who rashly condemn it. While it can not be expected that the refinements of the test can be carried out in the average practitioner's office, still there is no question that even by its simplest application, much light may be thrown upon many pathological conditions of the urinary tract, which might otherwise remain al-

together obscure. For example, any urine containing pus with an appreciably diminished output of phenolsulphonephthalein, should at once suggest an involvement of one or both kidneys. And yet how many men there are who are more than willing to ascribe cystitis, unqualified, as the sole cause of the patient's symptoms. As a means of offering a fairly definite prognosis in many conditions, the phenolsulphonephthalein test is very reliable, and when the question arises as to the functioning power of a kidney whose fellow is so diseased that nephrectomy may be necessary, we have yet to find any one method which gives us a more satisfactory idea of the function of the better or sound kidney.

The phenolsulphonephthalein test was originated, and studied experimentally and clinically by Geraghty and Rowntree of Johns Hopkins University. Since the publication of the original article,* a number of clinicians in trying out the test have gotten results which compare most favorably with those of the originators. For the estimation of the total output of phenolsulphonephthalein from both kidneys, the technique of the test scarcely varies at all from that employed originally by Geraghty and Rowntree. However, other investigators have contributed very materially to its practical application, especially in comparing the function of the two kidneys in specimens obtained by ureteral catheterization. Notable among these contributions, where the method employed is that of injecting the phenolsulphonephthalein intravenously, is the excellent article of Keyes and Stevens,* who show clearly the advantages of the intravenous administration.

In order to tempt those who are skeptically inclined, to give the phenolsulphonephthalein test a trial, I shall at the risk of tiring others (for it has been described so many times before) attempt to give briefly the technique of the test as it is employed today, both for estimating total renal function and comparing the output of each kidney separately. In the first instance, 1 c. c. of the solution

*Transactions of the American Association of Genito-Urinary Surgeons, Vol. V, 1910; p. 59.

*Transactions of the American Urological Association, Vol. VI, 1912; p. 31.

*is injected intramuscularly, preferably into the buttocks, as one injects the various mercurial preparations in the treatment of syphilis. Ten minutes are allowed to elapse (the time necessary for absorption and appearance of the drug in normal cases) and the urine collected for the first and second hour respectively from that time. In cases where it is suspected there may be an appreciable delay in the appearance of the drug, the bladder may be catheterized and the time of appearance noted by allowing the urine to drain into a receptacle containing a drop of sodium hydroxide (about twenty-five per cent strong). As soon as the drug appears, a pinkish to brilliantly red color will be noted as the urine comes in contact with the alkaline solution. The one and two hour specimens may now be collected from the time of appearance. This catheterization feature of course makes the test more accurate, but is an extra bother and except in extreme cases may be dispensed with. The amount of phenolsulphonephthalein is next estimated in each specimen according to the method described later.

According to Geraghty and Rowntree's original investigations, in normal cases forty to sixty per cent of the drug should be excreted during the first hour and twenty to twenty-five per cent in the second hour, or a total of sixty to eighty-five for the two hours. I, personally have found the average to be nearer the lower figures, i. e., forty and twenty per cent for the first and second hours.

In cases where it is desired to compare the functional capacity of one kidney with the other, the intravenous method of administration is employed as follows: The ureters are first catheterized,

*The preparation we use is put up by the Hynson, Westcott Company, of Baltimore, and contains 6 milligrams of the drug in 1 c. c. Or, according to Geraghty and Rowntree, it may be prepared as follows: "0.6 gram of phenosulphonephthalein and 0.84 c. c. of $\frac{2}{N}$ N. O. H. solution are added to 0.75 per cent na. cl. solution. This gives the mono-sodium or acid salt, which is red in color and slightly irritant locally when injected. It is necessary, therefore, to add two or three drops more of the $\frac{2}{N}$ hydroxide, a quantity sufficient to change the color to a beautiful Bordeaux red. This preparation is non-irritant."

preferably with fairly large, flutetipped ureteral catheters. As soon as the catheters begin to work satisfactorily, 1 c. c. of phenolsulphonephthalein solution is injected intravenously. It is usually easiest and most satisfactory to employ the veins at the elbow for this purpose. Care must be taken to insure getting all the solution into the vein, otherwise the test will be vitiated. It is a good plan to fit the needle on to the loaded syringe first, as the syringe offers a convenient handle for manipulation. Then after introducing the needle, remove the syringe to see whether or not blood will come through the needle, which it usually does in drops at regular and short intervals.* The syringe is again connected with the needle and the injection is made. The time, from the moment of injection until the appearance of the drug from the catheters is now noted. The urine from each catheter is allowed to drain into separate receptacles containing a drop or two of sodium hydroxide as in the previous method, and the first "blush" carefully watched for. The time of appearance is usually about three minutes. Specimens are collected from each catheter for fifteen minutes, and as a rule, beginning with the time of appearance in one kidney.

In intravenous injection, the amount excreted for the first fifteen minutes, is about one per cent per minute from each kidney, or a total of thirty per cent. After the first fifteen minutes, the amount of excretion falls off rather rapidly.

From a study of twenty-six cases, where intravenous injection and ureteral catheterization were employed, Keyes and Stevens* found that the time of appearance may vary widely. In fourteen of their normal kidneys, it varied from two to nine minutes, with an average of four and one half minutes. They also found that the time of appearance may be approximately the same for two kidneys whose functions differ markedly and believe that "it is peculiarly misleading and should be taken in consideration only for the purpose of estimating the time at which to begin collecting

*This is not an absolute test of having introduced a needle into the lumen of a vein, since a needle plunged through a vein will sometimes cause a hematoma from which blood will flow in drops for a few seconds. But in the latter instance, the blood soon ceases to flow altogether or the intervals between the drops very soon get further and further apart.

*Transactions of the American Urological Association, Vol. VI, 1912.

specimens for phenolsulphonephthalein estimation." From the same series of cases they further conclude, that the phenolsulphonephthalein output is little if at all influenced by oliguria or polyuria, an observation which seems to be readily enough substantiated by the numbers of cases one sees in which the greater per cent of the drug is frequently found in the smaller volume of two specimens of urine collected for the same period of time.

For total estimation of renal function, the intramuscular employment of phenolsulphonephthalein is not only simpler but ordinarily more accurate. For here, one is dealing with larger dilutions of the drug and longer periods of excretion, factors which make for accuracy as opposed to the errors which may occur in collecting specimens of more concentrated dilution, and in much shorter and more exact periods of time, as is required in the intravenous method. Then, too, in the latter, as has already been pointed out, a drop or two, accidentally injected *extravenously*, will interfere with its accuracy. But the intravenous method has its definite place in estimating separate renal function. In the first place, the intramuscular method is too long a procedure for the patient propped up in a semi-recumbent posture with a catheter in each ureter. But, most important of all, is the fact ascertained by Keyes and Stevens that after intramuscular injection of phenolsulphonephthalein inhibition of excretion of the drug occurred in certain kidneys following catheterization of the ureters, whereas such inhibition did not occur when the drug was given intravenously.

The following brief report of cases* will serve to illustrate the application of phenolsulphonephthalein in determining both the total functional capacity of "surgical" kidneys, and as a means of comparing the capacity of one kidney with the other:

Case 1—F. B. F. Male. Age 26. Of healthy appearance. Gave a history extending over a period of about two years, of having fifteen or twenty sudden attacks of severe pain over region of appendix. Toward end of this period, he began to complain of dysuria and hematuria, the latter being more or less intermittent.

*I am indebted to Dr. Edward L. Keyes, Jr., with whom I am associated, for the privilege of publishing these cases.

Urine Analysis: Bloody, Sp. Gr. 1012, albumin 1-8 per cent, no sugar, many R. B. C., much pus and a few staphylococci. The phenolsulphonephthalein test (intramuscular injection) gave 45 per cent in the first hour, and 14 per cent in the second hour.

At a later date, the patient was cystoscoped, the ureters catheterized and an intravenous injection of phenolsulphonephthalein given. Analysis of the separate specimens of urine:

Right kidney:	Left kidney
Much pus.	Mod. amount of pus.
Phenolsulphonephthalein—none in 13 minutes.	Phenolsulphonephthalein, (appeared in 3 minutes.
Urea 0.15 per cent.	11½ per cent in 10 minutes
	Urea 0.6 per cent.

A scratch was obtained on a wax-tipped catheter introduced into the right ureter.

Radiographs showed a large stone in pelvis of left kidney, a large stone in pelvis of right kidney, together with several smaller stones throughout kidney, and a shadow suggesting stone in the right pelvic ureter.

The left kidney was opened and a good sized stone, together with considerable gritty debris was removed. About three months later, the right kidney was explored, found to be a mere shell, full of stones, and was removed.

It is interesting to note that a cystoscopy performed two months after the first operation, showed *no* pus from the left kidney.

At first glance the findings in the above case seem to indicate a discrepancy between the phenolsulphonephthalein output and the renal pathology, for the total output is quite within the normal limits. But the *separate* output clearly shows which kidney was the more incapacitated (in fact utterly incapacitated) and both the total and separate outputs bear testimony to the fact that the left kidney was quite capable of answering for the work of the two combined, a fact attested to by the splendid general appearance of the patient. Incidentally the picture also serves well to illustrate how little the functioning power of a kidney may be disturbed by the presence of a stone of good size, provided, of course, no great amount of kidney tissue has been destroyed, as was the case in the right kidney.

Case II—T. G. Male. Age 37. Complained first of pain in right groin, and a short while thereafter of pain across sacrum. A month later, he began to have frequency of micturition with pain at the end of the act. Six weeks later, he noticed a slight hematuria. When the patient presented himself for examination, four months from the beginning of his symptoms, he was urinating every one or two hours during the day.

Urine Analysis: Pale, cloudy urine, Sp. Gr. 1010, albumin 1-16 per cent, no sugar, many R. B. C., much pus, some staphylococci and a moderate number of tubercle bacilli.

An intramuscular phenolsulphonephthalein injection gave a total output of 35 per cent for the first hour; second hour's output not noted. Ureteral catheterization showed pus and tubercle bacilli from the right kidney; no pus, no acid bacilli from the left kidney. Intravenous phenolsulphonephthalein not done.

Right nephrectomy showed a moderately dilated ureter and many obvious tubercles of the upper pole. However there apparently still remained a great deal of normal parenchyma.

The patient made an uninterrupted recovery. While the output of phenolsulphonephthalein in the above case is not strikingly low, it is low enough to direct attention to the kidneys, especially when taken into consideration with the urinary findings. Had separate examinations been made, they would doubtless have shown a high output from the left kidney with a relatively low output from the diseased side.

Case III—E. W. Male. Age 23. Gave a history of a left-sided tubercular epididymitis for two years. No marked urinary symptoms.

Urine Analysis: Pale, cloudy, Sp. G. 1015, acid, A. 1-16 per cent, no sugar, pus and tubercle bacilli. Intravenous phenolsulphonephthalein 2 per cent in first hour; second hour not noted.

Ureteral catheterization showed pus and tubercle bacilli from left kidney; no pus, no acid fast bacilli from right. Left nephrectomy. Ureter dilated to size of little finger. Parenchyma infiltrated with tubercles in all stages at upper pole, elsewhere normal.

The right epididymis and left testicle were found to be infected and were removed. Recovery.

Case IV—Mrs. J. A. Age. 38. This patient presented herself, complaining of difficulty in urinating and hematuria. These symptoms had first troubled her six weeks before. During the past thirteen years she had undergone three operations, one for an ectopic gestation, one for prolapse of the viscera, and finally, an abortion of a three months' fœtus because she could not urinate.

The patient had lost 25 pounds in a year's time. Physical examination revealed a large, moderately adherent, low kidney on the right side. The bladder was found to contain large blood clots, which explained in large measure her difficulty in urination, as these clots would actually block the urethra.

An intramuscular phenolsulphonephthalein test gave 35 per cent in the first hour and 16 per cent in the next twenty minutes. A cystoscopic examination was made before all the intramuscular phenolsulphonephthalein had been eliminated. However, specimens were collected from each ureter anyway, that from the right side showing only a trace of phenolsulphonephthalein in ten minutes, while the left side excreted 5 per cent in ten minutes.

The right kidney was removed the day following the cystoscopy, and revealed a very large non-adherent hypernephroma chiefly involving its lower pole. Convalescence uneventful.

It is worthy of note that while 5 per cent of phenolsulphonephthalein would not be considered a good output from one kidney after intra-venous injection, it is unusually good after intra-muscular injection, especially during the second hour's excretion.

Case V—Mrs. A. E. T. Age 44. Gave a brief history to the effect that she had pain in her left side for three months. Remained in hospital two weeks prior to operation without any rise of temperature. Urine full of pus. A total phenolsulphonephthalein test gave 10 per cent for the first hour and 10 per cent also for the second hour.

Ureteral catheterization showed much pus and 0.4 per cent urea (4 grams to litre) from the left side, and a very little pus, and 1.2 per cent urea (12 grams to litre) from the right side.

Under local anesthesia, the lower pole of her left kidney was "tapped" and a large quantity of pus evacuated. The patient was up in ten days, and a cystoscopic examination three months later

showed a normal bladder with normal ureteral orifices. She seemed perfectly well.

From such a low total output as is shown in the foregoing case, one might conclude very properly that both kidneys were involved, as indeed they were, though the infection of the one side was quite mild as compared with the other. In this instance, the urea output indicated quite accurately the badly diseased kidney. The case is of further interest in that a cure was effected by means of nephrotomy.

The bacteriologist reported the infection as probably due to the bacillus dysentericus.

TECHNIQUE OF ESTIMATION.

Originally, a very exact and quite expensive instrument, called the Duboscq Colorimeter, was used for this purpose. But this has been largely discarded in favor of other simpler and less expensive instruments. The latter, while not so exact, are exact enough and are becoming more popular on account of the price. The Dunning Colorimeter, one of the latest, simplest and cheapest, is well adapted to the needs of most of us. It consists of a series of sealed ampules about 15, containing different strengths of phenol-sulphonephthalein in alkaline medium. The solution to be tested is put into an open ampule, made for the purpose, and the shade and density of the specimen is compared with that of the other ampules until one is found which matches the specimen the nearest.

The entire quantity of urine representing this specimen to be estimated is diluted to about 200 c. c. with water and rendered alkaline by the addition of a 5 per cent solution of sodium hydroxide (however, most any alkaline solution will answer the purpose). It is then further diluted with water enough to make one litre. The open ampule is then filled with some of the latter solution and comparisons made. If the specimen matches the ampule marked 30 or 50, for example, then the reading is 30 per cent or 50 per cent as the case may be, since the test ampules are all based on a solution made by diluting 1 c. c. of the standard phenolsulphonephthalein solution up to 1,000 c. c. of water.

If only a slightly reddish coloration is obtained after adding the alkaline solution, it indicates that the phenolsulphonephthalein con-

tent is small and hence dilutions should be carried only to 250 or 500 c. c. or even smaller fractional parts of 1,000. The reading should then be divided by 4 or 2 or a higher figure as the case may be.

The presence of blood in the urine sometimes makes an accurate reading impossible. By centrifuging the urine, and discarding the sediment, this difficulty may be obviated, though the accuracy of the test is of course influenced to some extent by this procedure. Urines which are cloudy from pus or other causes, may be rendered clear, sometimes by filtering or better by adding basic lead acetate,* and filtering. This precipitates various salts in the urine which carry down the pus, etc., with them. The phenolsulphonophthalein is not precipitated.

PHENOSULPHONENHTHALEIN IN NEPHRITIS.

In closing, a word or two about the employment of phenolsulphonophthalein as a test in the ordinary nephritis cases (the "medical" kidneys) would perhaps not be out of place. Geraghty and Rowntree, in their original article, claim almost as much for its use as a functional test in the latter as they do in the case of the "surgical" kidney, laying especial emphasis on its value in acute nephritis and in differentiating true nephritis from obscure conditions which resemble the latter clinically. They cite several clear cut cases, which seem to substantiate their view.

But there is still much difference of opinion among internists as to the real value of any one functional test in nephritis. This can be well understood when it is considered that the classification of the different forms of nephritis is yet quite hazy and is constantly undergoing more or less change. On theoretical grounds, however, it would seem that phenolsulphonophthalein could be employed with advantage in cases of tubular nephritis (formerly and improperly known as parenchymatous nephritis), but would be unreliable in glomerular nephritis (interstitial nephritis) since Geraghty himself states that the drug is excreted by the tubules of the kidney, the glomeruli taking little or no part in its elimination.

*Geraghty and Rowntree. Transactions of the American Association of Genito-Urinary Surgeons, Vol. V, 1910.

Extracts from Home and Foreign Journals

SURGICAL

BALNEOTHERAPY FOR ENLARGED PROSTATE.

Fernandez reports the case of an elderly man with hypertrophied prostate causing intense reflex phenomena and polyuria, with pains before and after micturition, the desire returning every ten minutes on an average, rest at night being impossible. He had tried all kinds of measures but without avail. Fernandez then ordered baths the same as for uterine trouble, ten or twelve baths of ten minutes each, with the water at 45 C. (113 F.). After the first bath conditions were improved so much that two hours elapsed before micturition became necessary. By the end of sixteen days, the cure seemed complete, there being no further pains and the intervals approximately normal. This condition has persisted for two months to date. (Fernandez gives no details of the technic for the baths *a la prostata*, except that they were taken "according to his method." He practices at Vichy Catalan, Spain.)

MUSCULO-SPIRAL PARALYSIS FOLLOWING DISLOCATION OF SHOULDER. PATIENT.

"I had rather an unusual experience in having two of these cases come into my service on the same day about six months ago. Both of them had dislocations. Both had musculo-spiral paralysis. One case began to show steady signs of improvement after reduction, and, until I lost track of him, he made quite an appreciable advance. In the other case I happened to follow the patient for two or three months and there was no evident sign of improvement. I feel the history of most of these cases is that after about a year, unless there has been great damage done to the nerve, you get a pretty satisfactory ability to use the arm."—*Long Island Medical Journal*.

TETANUS RELAPSE AFTER FIVE MONTHS.

Heichelheim states that at the outbreak of the war before prophylactic antitoxin had come into general use, relapse in tetanus was so infrequent that he could find but two recorded cases. He himself has seen a case during the present year in which by chance a wounded soldier failed to get his prophylactic injection. Twelve days after a shell fragment wound over the sacrum the disease announced its presence. It was localized at first in the left thigh. Intensive treatment was at once begun with antitoxin, magnesium sulphate, morphine, etc. Severe anaphylactic shock was met promptly with camphor injections. The entire outbreak was soon under control, while the patient was free from spasms in one month after the day of injury. In about three and one-half months it became necessary to remove a piece of bone at the site of the wound, and twelve days after operation there was a second outbreak of tetanus, a duplicate of the first, which had been of the so-called inferior type, manifested chiefly in both lower extremities. For fear of anaphylaxis serum was not injected save for small quantities in the muscles and in the wound. The patient made a slow recovery, and was not free from spasms for several months. This case differs in type from those in which a spontaneous relapse occurs, for the disease was evidently lighted up by an operation which must in some way have mobilized a latent condition.—*Medical Record*.

REMOVAL OF STONES FROM KIDNEY.

From January 1, 1908, to December 31, 1915, 450 patients with stone in the kidney were operated on in the Mayo Clinic (484 operations). Three died, a mortality of 0.6 per cent. This percentage represents the number of patients who died in the hospital without regard to cause of death or length of time after operation. Mayo says that the results achieved were due more to the painstaking care with which the diagnosis were made, the function of the kidney estimated, and the patients prepared for

operation, than to any purely technical feature of the procedures employed in removing the stones. The presence of the stones was shown by the roentgenogram. By means of the pyelogram the urologist was able to say with certainty whether the stone was in the pelvis, calyx, or parenchyma of the kidney. Forty-eight patients (9.9 per cent) had stones in both kidneys. In these cases, the second kidney was found pyonephrotic, a condition necessitating nephrectomy. In three instances stones were found in a single kidney and in two instances in a horseshoe kidney. The condition was diagnosed before operation as nephrolithiasis in an anomalous kidney. In one case of horseshoe kidney the stone had caused a pyonephrosis in the left half. This portion of the kidney was resected and recovery followed. Renal stones were found in two patients with duplication of the renal pelves. In both, the caudal pelvis was involved; in one, a pelviolithotomy sufficed but in the other resection of the upper half of the kidney was necessary.

There were two cases of stones in the remaining kidney after nephrectomy. Multiple stones in the parenchyma of the kidney are prone to recur. In one case in which Mayo removed twenty-eight stones from one kidney and twenty-six from the other, he reoperated on the patient within two years for stones in both kidneys. The following operations were performed: pelviolithotomy, 206 cases; combined pelviolithotomy and nephrolithotomy, 34 cases; nephrolithotomy, 40 cases and nephrectomy, 204 cases.

—*The Journal of the Amer. Med. Asso.*

A SIMPLE APPARATUS FOR THE TREATMENT OF INCIPIENT HIP-JOINT DISEASE.

The two essentials in the treatment of hip-joint disease are extension to separate the surfaces of the joint and immobilization of the joint.

The author uses an extension apparatus at night which consists merely of a boot made of plaster and laced down the front so that it may be readily removed in the morning and replaced at night. To the foot of the cast is attached a cord and weight. For day

use, there is a high foot and a pair of crutches. The weight of the lead keeps the hip extended and fixed. The child is thus kept in the open air all day long.—*Pediatrics*.

CANCER NOT HEREDITARY.

The annual meeting of the American Association of Life Insurance Presidents was held in New York City on December 15. In a paper on heredity of cancer based on a two-year study of original insurance statistics bearing on the eighty thousand annual deaths from this disease in the United States, Mr. Arthur Hunter, president of the Actuarial Society, says: There seems little to support the view that cancer is the result of contagion. Twenty thousand applications for insurances were reviewed and it was found that in 488 cases one only of the parents of the applicant was stated to have died from cancer and in four cases both parents were stated to have died of that disease. There were 122 times as many cases in which one parent had died of cancer as those in which both parents had died of that disease. There could hardly be a stronger test than in the case of husband and wife. Men and women who are in anxiety of mind on account of the appearance of cancer in their ancestry or immediate family may dismiss such anxieties, as there is no statistical evidence at the present time that the disease of cancer is transmitted by inheritance in mankind.—*New Orleans Medical and Surgical Journal*.

FRACTURE OF THE BASE OF THE SKULL; EARLY DOUBLE SUBTEMPORAL TREPANATION; RECOVERY.

Meriel E. (Boston Medical and Surgical Journal), points out that early operative interference in fractures of the base of the skull is exceptional. The field is difficult to approach for cleansing and disinfection and besides the dangers concomitant to operation are perhaps as great as those due to the lesion. Meriel differs from this view and reports a case to show that benefit can

follow a simple and rapid operation even in cases which are considered beyond the resources of surgery.

In a very severe case of fracture of the vault irradiating to the base with hemorrhage from the nose and mouth, he practiced an early bilateral subtemporal trepanation, decompressing and draining the cranial cavity. The technique followed was that of Lejars. Immediate benefit resulted. The clonic convulsions ceased, circulation became regulated and the temperature approached normal. There was only slight subcutaneous suppuration. The man rapidly improved. Meriel advises the operation. Chudovsky in 1898 gave the mortality in non-reported cases of base fractures as 64.2 per cent. Cushing—in operated cases had 13 recoveries in 15 cases and Vincent 7 recoveries in 7 operated cases—*Medical Progress*.

VALUE OF NERVE SUTURE IN WAR SURGERY.

Drs. Chiray and E. Roger reported to the Societe medicale des hopitaux de Paris on cases of nerve suture. They insist that in order to draw valuable conclusions it is necessary to classify the observations carefully and to base them only on cases of nerve suture after complete section. Chiray and Roger found that nerve suture is followed by negative results in 29 per cent of the cases; sensory response to electric stimulation, without motor response, occurs in 48 per cent., and motor and sensory restoration occurs in 23 per cent. Return of sensation always precedes return of motion. Motion returns in the radial nerve after five months, in the ulnar after eight months, in the median after seven months, in the sciatic and popliteal after two to five months. The radial, sciatic and external popliteal nerves seem to give the best results. Experience has shown that early operation is the most effective; nevertheless, operations performed at the fourth or the sixth month are often successful. Chiray and Roger emphasize the importance of total resection of all fibrous tissue, coaptation of the severed ends without tension and without bruising. The particular method of operation does not seem to have any decisive bearing on the result. End-to-end suture and nerve grafting

give equally good results. Chiray and Roger are convinced of the importance of postoperative treatment, particularly the use of a prosthesis and of the local ionization of potassium iodid. Dr. Albert Frouin, who has done considerable research work on the suture of nerves after complete section, reported to the Societe de Biologie the results he obtained. He makes an immediate suture, using silk floss instead of catgut for suture material, and the finest needles obtainable so that he can suture the perineurium without injuring the axis cylinders. Seventeen animals operated on in this manner walked very well on the soles of their feet after fifteen days.—*The Journal of the Am. Med. Asso.*

THE BLISTER IN PROSTATIC ENLARGEMENT AND IRRITATION OF THE BLADDER.

A short time since a man of about forty years called at my office with about the worst case of bladder irritation and apparent prostatic enlargement I ever saw, and as a result of a case of gonorrhea. Night or day he did not have ten minutes of rest from the usual symptoms of prostatic enlargement and bladder irritation.

At the time I was myself confined to my room with a case of tonsillitis, for which I had used a fly blister, which I am in the practice of applying in the early stage and with the view of aborting the case. The case of my patient seemed so urgent that I at once thought of trying a blister to the perineum, notwithstanding the possible irritation to the bladder that cantharides might produce. I gave the patient a box of the fly blister and instructed him how to use it, urging him to make repeated efforts until he got a blister and to keep it open by repeated use. Of course, I also gave him a reasonable supply of opium and a good kidney and bladder remedy. The case had been running two or three months before the patient came to me and had been treated by his home doctor.

He reported a few days ago and seemed about well and said: "My brother said, 'How did Dr. P—— ever cure you so quickly?'" What I want to say in conclusion is this: I have had lots of ex-

perience with cases of this kind and have used the blister more than any man in America, I believe, and for various troubles, and I am willing to stake my reputation that I have made a discovery in using the blister for prostatic enlargement.

I suggest that a splendid thing to do also in such cases is to follow the blister with an application of antiphlogistine or something similar.—*Medical Brief*.

MEDICAL

MARFAN'S EPIGASTRIC PUNCTURE IN PERICARDITIS WITH EFFUSION.

Among recent discoveries bearing on pericarditis with effusion and its treatment there are a few of as much interest as Marfan's epigastric puncture. This operation is both exploratory and curative. All who have tried it bear testimony to its innocuousness and its value especially in tuberculosis and renal pericarditis. It deserves to be systematically employed in rheumatic pericarditis in which we should hardly venture to employ Dieulafoy's method.

As to the technique of the operation here are the details given by Dr. P. Lereboullet. The patient should be half sitting up in bed, the epigastric region uncovered and disinfected. Take a small trocar belonging to a Potain apparatus attached to the aspirator, or a stout lumbar puncture needle, not too pliable, fixed to a 10 or 20 cc. glass syringe. The site of the puncture is immediately below the xyphoid appendix in the middle line, the needle being then directed obliquely from below upwards by depressing the handle towards the abdominal wall as we proceed inwards in order to bring the needle in proximity to the posterior surface of the xyphoid appendix and sternum, in fact as if we wished to scrape that surface. Having penetrated to a depth of 4 centimetres in the child of 6 in the adult the needle will have entered the pericardial sac.

There are two formal contraindications *vis* excessive abdominal tympanites preventing our taking the xyphoid appendix as

our guide and the peculiar deformity of the thorax known as funnel-shaped or infundibular thorax.

Should there be any error of diagnosis the puncture will reveal the fact and this without any untoward consequences. If there be fluid it enables it to be withdrawn without the least risk to the patient. In suppurative pericarditis it ought, however, only to serve the purpose of ascertaining the nature of the fluid because pericardotomy will have to be performed at once. It might conceivably fail us in cases of posterior pericarditis as described by Cassart in which the fluid is shut off and encysted at the back of the heart.—*Le Monde Medical*.

HEROIN OF NO VALUE.

At a recent meeting of the Committee on Drug Addiction of the Committee on Social Hygiene of the National Committee on Prisons, it was regularly moved by Dr. Frederick Peterson and seconded by Dr. Samuel W. Lambert that it be resolved that in the opinion of the committee, the drug heroin is of no real value in the practice of medicine and that its place may be better taken by more efficacious agents that do not menace public welfare.

Resolved, That the committee recommend federal legislation to prevent the importation, manufacture and sale of heroin in the United States.—*New Orleans Med. and Surg. Journal*.

PELLAGRA.

Sambon has maintained for eleven years that pellagra is probably an infectious disease, possibly the work of some protozoon, which is transmitted by the sting of some winged insect. Recently he has studied pellagra in Europe, the United States and the Antilles, and he has established its presence in the British Isles, in British Guiana, and in several parts of France. He has noted the prevalence of pellagra in quite young children in the endemic foci, also the great importance of the disease as a cause of insanity. He says that the history of pellagra as he traces it through the

centuries and in different countries shows that it occurs in certain regions, like sleeping sickness, and that those endemic foci remain permanent. Outside of the endemic foci the disease can neither be contracted nor transmitted. No instance is known, he affirms, of transmission of the disease in the hospitals or asylums to the medical or nursing force or other inmates, or from a pellagrin to her nursing infant. In the endemic foci the disease is inevitably contracted, and usually within the first year. The period of incubation may be less than two weeks. The youngest pellagrin he has encountered was a three months babe. The recurrences of the disease are like those of malaria; the flare-up may occur in March while the new cases develop later, in April, May or June. In conclusion Sambon remarks that pellagra was known in Europe long before the introduction of corn from America, and the geographic distribution of the cultivation or consumption of corn does not coincide with the distribution of pellagra, while prophylaxis based on the corn theory has proved futile.—*The Journal of the Am. Med. Asso.*

TREATMENT OF VINCENT'S ANGINA AND ULCEROMEMBRANOUS STOMATITIS.

Ramond states that in his division Vincent's angina is increasing while diphtheria is diminishing. The stomatitis is frequently associated with the first named, while the two also occur isolated. Lack of mouth hygiene seems to be the efficient cause. The microbiology and treatment are practically the same for each localization. Neo-arseno-benzol (neosalvarsan) is the best remedy, but is too costly, and something must be substituted, to wit, intensive local treatment. In the case of angina all membrane must be removed mechanically, after which solution of silver nitrate 1-50 is applied. This application should be preceded by a gargle of cocaine solution and the use of a blunt curette for removing all membrane and sanious detritus. Hemorrhage is slight and controlled by a gargle of hydrogen peroxide. The raw surfaces begin to granulate and soon cicatrize. In ulceromembranous stom-

atitis the curette may be of use, but is not adapted for gingivitis, and a hard toothbrush is substituted. The toothbrush, Ramond says, should be used for several days in succession and be followed up with silver solution.—*Medical Record*.

HYPERIDROSIS.

A. W. Stillians, Chicago (Journal A. M. A., December 30, 1916), says that treatment heretofore had been unsatisfactory until it had been shown that it could be controlled by the Roentgen ray. This, however, is expensive and not altogether safe, and he recommends to the patient as an inexpensive local application a 25 per cent solution of aluminum chlorid. In prescribing this the fact that it is incompatible with alkalis, sulphur, phosphorous and salenium must be remembered.—*Northwest Medicine*.

SPONTANEOUS PNEUMOTHORAX IN PULMONARY TUBERCULOSIS.

Bonsworff concludes from his experience in nineteen cases of this kind that treatment should aim to transform the spontaneous pneumothorax into a seropneumothorax or serothorax, and then, as soon as the fistula has healed, to aspirate the effusion and introduce nitrogen in its place, keeping up the artificial pneumothorax as long as conditions require. This method was applied in three of his cases and proved completely successful in two. In the third case the fistula refused to heal.—*The Journal of the Am. Medical Association*.

THE TREATMENT OF AMOEBIC DYSENTERY.

In a second communication (*British Medical Journal*, August 24, 1912, and *Univ. Med. Record*, July, No. 402), Prof. Leonard Rogers says that there is no doubt at all that the subcutaneous injection of soluble emetine salts is, in cases of amœbic dysentery and hepatitis, a specific remedy more active perhaps than any in

the whole range of medicine—not excepting quinine and salvarsan. Moreover, the reaction is so marked, as actually to be of diagnostic import. The most useful salt is the hydrochloride of emetine, in doses of from gr. $\frac{1}{2}$ to gr. 2-3 daily. The effects are so surprising as to render mere verbal description feeble, and offer a curious commentary on the therapeutics of those who have attempted to show good results in such cases from the administration of ipecacuanha *sine* emetine. In a later note Rogers says that emetine is almost equally efficacious when given by mouth.—*Pacific Medical Journal*.

SYMPATHY.

A doctor should not be harsh, hard-hearted and unsympathetic! He should be kindly, gentle and sympathetic. It is the most grateful thing in the world, where there is a life hanging by a slender thread. Many times where there is mental anguish and heart-breaking anxiety, the presence of the good physician is appreciated beyond expression. If he can no longer minister to the dying, he can at least be a solace to the living. There seems to be something heartless for a physician to pronounce a case hopeless and abruptly leave the grieving family to face the approaching death without the closing ministrations of that physician. Stay by them to the end. It will pay!—*Charlotte Med. Journal*.

THE OCULOCARDIAC REFLEX IN HYPOTHYROIDISM.

Petzetakis studied myxedematous idiots, ordinary cases of myxedema, and subjects with hypothyroidism in connection with the oculocardiac reflex as controlled by auscultation and the sphygmograph. It was possible in some of these subjects to arrest the heart beat for as long as 15 seconds, during which the subject became as dead—pale and unconscious. When the heart resumed action it beat 25 to 30 times the first minute. The normal behavior of this reflex was therefore greatly augmented. It is believed that the reduction below normal of thyroid substance in

the blood depressed the sympathetic and thus allowed the vagus to overact—in other words, these subjects were rendered vagotonic. In hyperthyroidism and opposite effect can not be obtained in the same degree—in fact, the heart was slowed as well as accelerated. If hyperthyroid subjects are given thyroid substance the results are likewise inconclusive.—*Medical Record*.

OBSTETRICAL

HEMATOCOLPOS IN WOMAN OF SEVENTY-FOUR.

In a woman of 74 who had menstruated normally until thirty-five years previously, severe pain, pointing to obstruction of the urinary flow, led to the detection of a large fluctuating tumor which filled the entire pelvis and extended upward almost to the umbilicus. The vagina was occluded by senile atresia. Laparotomy in spinal anesthesia revealed the tumor to be an enormous hematometra and hematocolpos with bilateral hematosalpinx, Panhysterectomy was performed successfully by Gellhorn, and the tumor, which was connected with the vagina only by loose connective tissue, was removed unopened. Convalescence was undisturbed; the patient left the bed on the twelfth day after operation but succumbed to an embolism on the fifteenth day. The cause of bleeding into the occluded genital tract was an adeno-carcinoma of the body of the uterus.—*The Journal of the Am. Med. Asso.*

THE USE OF PITUITARY EXTRACT IN POST-ABORTION CURETTAGE.

In an editorial note in the *Medical Record* of December 2, 1916, mention was made of this use of pituitrin, and the statement was ventured that it was first proposed by a writer in *Surgery, Gynecology and Obstetrics* for September, 1916. We have learned that this was an error, as Dr. Jacob L. Bubis, of Cleveland, in a paper read before the Gynecological Section of the New York Academy

of Medicine on November 23, 1915 (*American Journal of Obstetrics*, No. 4, 1916), reported three cases in which this measure was resorted to with success. The advantages of giving pituitary extract in these cases he summarized as follows: (1) Preliminary packing of the cervix and vagina to induce softening of the cervix and stimulate uterine contractions is usually unnecessary. (2) No packing is placed in the cervix or vagina after emptying the uterus. (3) The injection of pituitrin is given after the cervix has been dilated while the patient is under an anesthetic. (4) Very little blood is lost while removing the placenta piecemeal. (4) The uterine cavity decreases in size as rapidly as its contents are removed. (6) No hot irrigations are necessary. (7) The total operation takes only a few minutes.—*Medical Record*.

PROGRESS IN OUR KNOWLEDGE OF OVARIAN SUBSTANCE THERAPY.

The absence of a definite physical action in the genital gland extract (in contrast with the thyroid, hypophysis and adrenals) will doubtless cause scepticism regarding the therapeutic value of these bodies. Bucura in the *Centralblatt für Gynäkologie* October 14, blames this scepticism in part upon poor ovarian extracts, the manufacture of which in Germany is without State control. The substance again is by no means always identical when prescribed. Finally much may depend in practice on the animal which supplies the organs. We know nothing of a pure ovarian hormone, and if such exists it has no connection with the corpus luteum. At puberty not the latter but the original inner secretion, acting in greatly increased production, is responsible for the characteristic changes in the female organisms. For biological reasons ovarian extracts should come from the sheep or pig, preferably the latter.

In the natural and artificial climacteric a good preparation should be given in increasing dose until all unpleasant symptoms disappear, which may require from one to three years. The extract had best be given first over a period of 3 to 8 weeks, after

which it is discontinued for one week, to be resumed again for 4 to 6 weeks, etc. Eventually one week in each month represents the period of exhibition. Apparently a high blood pressure may be brought down by the treatment. Aside from the climacteric the indication for ovarian extract are very numerous; in general, whenever the function of the ovary is defective. Hence, it may be tried out in many obscure conditions. Thus far the only known contraindication is tuberculosis.

In opposition to Bucura's views as based on clinical experience numerous experimenters regard the corpus luteum as having highly specialized properties. It has even been claimed that it is able to arrest the development of the testicle in young animals. Novak, in an article on the functions of the corpus luteum (*Centralblatt für Gynäkologie*, October 28), agrees with Bucura that the difference between the secretion of the corpus and that of the follicle is merely one of degree—*Medical Record*.

ZINC CHLORID IN UTERINE HEMORRHAGE, PARTICULARLY WHEN CAUSED BY UTERINE MYOMAS AND METRO-ENDOMETRITIS.

Dr. H. J. Boldt, New York: I do not approve of the removal of the uterus for bleeding if it is not the seat of a neoplasm. Zinc chlorid is used in all instances of severe bleeding, whether due to metro-endometritis or simple endo-metritis, but particularly when caused by interstitial myomas of small size. In large tumors, especially of the uterus, it is more desirable to extirpate. I use a 50 per cent solution of zinc chlorid more frequently than weaker solutions. Care must be taken to avoid having the medicament come in contact with the cervical mucosa lest a stricture result. In several instances of very profuse bleeding from interstitial myomas, some measuring about 6 inches in diameter, in women past 40 years of age, I have seen complete amenorrhea established after using twelve, or even a less number of zinc chlorid applications. While the tumor do not decrease in size, the health of the patients improves as the result of amenorrhea. There must be no oozing of blood from the endometrium when the intra-uterine

applications are made; the uterine cavity must be dry. If it is not, it may be prepared with an intra-uterine tampon of styptic gauze.—*The Journal of the Amer. Med. Asso.*

ECTOPIC PREGNANCY.

The conclusions reached by Oastler from observation of these cases would seem to be that all subacute ectopic pregnancies should be operated on at once, removing from the abdomen the tube affected, the fetus, placenta, membranes and blood. All acute cases should be operated on at once except cases in extremis. In these cases it would seem advisable to wait, watching the patient very carefully. If no improvement occurs in a very short time, operate. Two patients of this series bled to death. The ovarian artery had ruptured in both. One was an interstitial pregnancy. As there is no doubt, therefore, that patients can bleed to death, operation must not be delayed too long in waiting for a reaction in these extreme cases. The abdominal route was chosen in all these cases and it is undoubtedly the only safe procedure to follow. Inasmuch as there were no cases extending to the viability of the child in the series there will be no discussion of the treatment in this condition.—*The Journal of the American Medical Association.*

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M. D. corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

LEGISLATION.

We have at hand a newspaper clipping stating that a bill will be presented to the legislature of South Dakota to make it illegal to remove a normal appendix; illegal in that surgeons removing such an organ can not make the patient pay. It is aimed at unskillful and unscrupulous surgeons, and the citizens of South Dakota will be protected satisfactorily, since all appendices, after removal, must be sent to the state laboratory for examination.

We would like to suggest that the author of such a bill be sent for examination, too; not to the laboratory but to the observation ward of the state asylum.

This bill is but one of the many that are annually proposed to the legislators of the country, which show that some steps should be taken to regulate the personnel of our state legislatures.

However the bill may be intended, it is certainly a nice compliment to modern surgery, since it shows what the average layman—and the author of this bill can not be above the average—thinks of the diagnostic ability of reputable surgeons.

Unfortunately the author is not versed in microscopic pathology, to say nothing of the fact that he can not realize how close together and how confusing are the symptoms arising in the appendix, gall bladder, pancreas, kidney, ureter, Fallopian tube and intestines; and had he conferred with some doctor friend he would have learned that the appendix varies in length from almost noth-

ing to nine or ten inches, and that one microscopic section can show marked inflammation while an inch or so distant the cellular elements may appear normal. This simply means that the state laboratory would have to examine serial sections of each microscopically normal appendix before the organ could be classed as normal. Furthermore, it would mean longer delay before operation, since the physicians of that state would not care to be classed with the unskillful, and the interval operation would become as rare as it is now frequent.

This bill not only emphasizes the old saying, "Medical questions to medical men," but also the growing tendency of the state to regulate the practice of medicine far more than any other profession or business. Bills like the above should teach us that we need a Federal Bureau of Health, one of whose functions would be to pass on the work of state medical bills before they are voted on by men necessarily ignorant of medicine and surgery; such bills—whether passed or not—should also emphasize the pressing need for legislative reform of the legislatures themselves.—W. T. B.

UNITED STATES PUBLIC HEALTH SERVICE.

"Pray, Mr. Abernethy, what is a cure for gout?" was the question of an indolent and luxurious citizen.

"Live upon sixpence a day, and earn it," was the cogent reply.

John Abernethy, second son of a Scotch-Irish family, born April 3, 1764, a physician of rare discernment, a surgeon of great skill, a lecturer and teacher of dramatic magnetism, never said a better thing in his life. It is particularly apt in this country where the sin of overeating is far more common than the sin of overdrinking. Gluttony, always a fault, is all the more glaring in a land where a plentiful food supply permits it to be more general. The sallow, fat cheeks, the aching joints and irascible temper of the prosperous over-fed are far too common. Abernethy said to one such, the Duke of York, by the way, "Cut off the supplies as the Duke of Wellington did in his campaigns, and the enemy will leave the citadel."

Diet, however, is a really serious matter and many people suffer as much from dietary eccentricities and food fads as from actual disease. The average individual can eat good, plain, wholesome food in moderation all his life without ever being aware that he has a digestive apparatus. Starvation to cure a fancied ailment or to reduce an expansive waist line has shortened many lives, just as indiscretion in the opposite direction. Certain diseases do require a particular diet, but this should be chosen by a physician of skill and not self-prescribed. The self-prescriber often has a fool for a patient.

Abernethy was married on January 9, 1800, to a lady whom he met at the house of a patient. A brief courtship was followed by a proposal by letter, giving the lady a fortnight in which to make up her mind and deprecating any "dangling." He was not as temperate with regard to work as he was to food. He did not even interrupt his lectures for his wedding, and died at the age of 67, completely worn out, a victim of his gluttony for work.

Editor The Journal of Medicine and Surgery, Nashville, Tenn.:

DEAR SIR—At last the time has arrived when the fight is no longer between the Anti-Saloon League and the "liquor interests." It is now a fight between the forces of intolerance and the forces of human freedom—for control of body, soul and business.

The issue is squarely presented by the passage of the Bankhead bill in the Senate and the imminence of the passage of it or the Randall bill in the House—both measures designed to deny the use of the mails to any newspaper, magazine or other publication going into either prohibition state or local option county and carrying any advertisement of intoxicating liquor or, it may be, of any medicine containing a substantial amount of alcohol.

For several years the Anti-Saloon League has been trying to persuade newspapers and magazines to decline liquor advertising. With some of the publications this persuasion was effective. With others it was not, and now comes the attempt at legislative coercion, with the penitentiary in the background.

The fight for censorship of the columns of the newspapers will not stop with attacks on liquor advertisements or, indeed, with attempts to control advertisements.

Several states now prohibit the manufacture or sale of cigarettes, and it is inevitable that the Anti-Saloon League will be asked by the W. C. T. U. to urge legislation against newspapers carrying cigarette advertisements into such states.

In nearly every state it is unlawful to carry a pistol—what more logical than a law against newspapers carrying advertisements of these death-dealing weapons into such states?

After the advertising department of every newspaper and magazine has been subjected to censorship how can the news columns remain free? What of horse-racing reports, stock market quotations, Sunday baseball information—indeed why not suppression of Sunday papers and of Monday papers printed in whole or in part on the Sabbath—all bitterly opposed by the W. C. T. U. and the Anti-Saloon League?

But what of editorial liberty? If it be decreed that the use of liquor and of cigarettes is hurtful alike to the individual and to society is it not an act of hostility to the state and to the church for an editor to praise an old wine or to refer indulgently to the "makins" of a cigarette or to oppose in any way the cause of prohibition?

How long will it be, I wonder, before American people are jarred into the realization that soon they must look to the Anti-Saloon League for dictation as to what they may eat or drink, as to what lines of business they may engage in, as to how they may seek political preferment, as to how a newspaper may be edited and what form of advertising it may carry into the different states?

Very truly yours,

T. M. GILMORE,

President National Model License League.

P. S.—Herewith we give reprints of the Randall and Bankhead bills and trust that after reading same you will wire your protest to one or more Congressmen and also attack these measures editorially.

An ophthalmological service has been added to the other departments of Bellevue Hospital, New York. It is located in the new surgical pavilion but is entirely distinct from the rest of the hospital, having its own operating, examining and dressing rooms, a staff of attending surgeons, special internes and nurses. Its capacity for the present will be fifty beds. The service is in charge of Dr. Charles H. May, attending surgeon, who will have as his principal assistants Drs. Julius Wolff and John M. Wheeler.

SURGEONS ELECT OFFICERS.

At the annual meeting of the Southern Surgical and Gynecological Association, which was held in White Sulphur Springs, Va., December 11, 12, 13, the following officers were elected: President, Dr. William D. Haggard, Nashville; Vice Presidents, Drs. J. Ernest Stokes, Salisbury, N. C., and Francis R. Hagner, Washington; Secretary, Dr. Herbert A. Royster, Raleigh, N. C.; Treasurer, Dr. Legrand Guerry, Columbia, S. C., and member of the council, Dr. Thomas S. Cullen, Baltimore. The 1917 convention will be held in St. Augustine, Fla.

THE SOUTHERN GASTRO-ENTEROLOGICAL ASSOCIATION.

The association was organized in Atlanta on November 15. Active membership in this society will be limited to those investigators and practitioners of the seventeen southern states who are engaged primarily in the diagnosis and treatment of diseases of the digestive system. Regular meetings will be held annually, the next place of meeting yet to be announced. The following officers were elected: President, Dr. J. C. Johnson, Atlanta; vice president, Dr. J. T. Rogers, Savannah; secretary-treasurer, Dr. Marvin H. Smith, Jacksonville, Fla.; councilors, Drs. S. K. Simon, New Orleans; G. M. Niles, Atlanta, and Seale Harris, Birmingham; committee on admission and ethics, Drs. Geo. C. Mizell, Atlanta; J. E. Knighton, Shreveport, and J. B. Fitts, Atlanta.

Publisher's Department

SLUGGISH, OVERLOADED BOWELS.

When the bowels are sluggish and overloaded, the whole system is usually depressed and deranged by the retention of toxic waste material. Without delay it becomes necessary to increase the activity of the bowels and promote regular evacuation of their contents. For these purposes there is no remedy that will give more prompt and satisfactory results—with such freedom from griping or after-effects as Prunoids. One to three at bedtime will afford prompt relief—without the usual cathartic discomfort—and rapidly restore functional regularity of the bowels. As one prominent physician has said, "I use Prunoids because it regulates as well as evacuates the bowels." Samples will be sent on request to the Sultan Drug Co., St. Louis, Mo.

"Solution of Albuminate of Iron" (Liquor Ferri Albuminatis, Flexner.) Contains 13 per cent Alcohol. Each teaspoonful of this preparation represents one grain of Dry Albuminate of Iron in permanent solution. Robinson-Pettet Co., incorporated. (See adv. in this issue.)

OBSTIPATION FOLLOWING OPERATION.

There are many theoretical reasons why Interol should be of value to the post-operatively constipated patient. But the best reason is that it is of value. And the most gratifying thing about it is that in most cases, while at first, the patient may need as much as oz. I to oz. Iss of Interol per day, with time, he can diminish the dosage to as little as half an ounce a day, or an ounce every other day, and even discontinue Interol for periods of time. In many cases Interol is the last resort to avoid another use of the surgeon's knife.

Tongaline exerts a manifest action on the nervous system of the secreting order of glands, it diminishes the uric acid content of the blood, and produces a substitutive irritation in the region of the articular surfaces. On account of the exaggerated vasomotor action of Tongaline, the irritation drives the poisonous deposits toward the emunctories, causing a great secretion of bile in the liver, an abundant diuresis in the kidneys and a serious diarrhea in the intestines, while in the feces and in the urine we find a great quantity of uric acid.

These conditions secure the attainment of the desired effect, which is to expel from the organism all those agents, the accumulation and retention of which in the blood are the cause of rheumatism, neuralgia, grippe, gout, nervous headache, malaria, sciatica, lumbago, tonsillitis, heavy colds and excess of uric acid.

Colds that linger invariably owe their persistence to inability of the body to exert sufficient resistance to overcome germ activity. Recovery, in consequence, is always largely a question of raising the general vitality and increasing bodily resisting power. To accomplish this, no remedy at the command of the profession is so promptly effective as Gray's Glycerine Tonic Comp. Under the use of this dependable restorative and reconstructive, the appetite is increased, the digestion improved, the nutritional balance restored, and the vital resistance so raised that the body can control infectious processes, and establish a safe and satisfactory convalescence.

In the treatment of colds, therefore, "Gray's" can be relied upon to raise the defensive forces of the organism and fortify against germ attack.

NASHVILLE JOURNAL

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CHARLES S. BRIGGS, A.M., M.D., Editor.

W. T. BRIGGS, B.A., M.D., Associate Editor.

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No. 3

Original Communications

NURSING A DRINKING MAN.

BY T. D. CROTHERS, M.D., HARTFORD, CONN.

Is is a very sad statement to make but is probably true, that one out of twenty families in the country have some member who is often very sick from the excessive use of spirits. The physician is not often called from pride and desire to conceal what is thought to be a moral weakness. A nurse is brought in and after a few days the patient recovers. Some time in the future this occurs again, and bye and bye the physician is called, and curious explanations are given to friends outside, and the physician simply smiles and says nothing, but the family and the nurse are keenly aware of the trouble and are always more or less confused and do not know what to do. The person may come home stupid or garrulous and very irritable, scolding, fault-finding and unreasonable. The family are greatly distressed and a nurse is called in. The patient soon believes that he is sick, giving other reasons than the use of spirits as a cause and submitting to the instructions of the nurse. In a little while he

recovers from this excited condition and not unfrequently insists on having spirits to keep up his condition. Attempts made to limit or prevent its use are resented, and after a time he submits, but most disagreeable scenes occur in the family. There are no books of instructions for treating such persons, even the physician has a very vague idea of what is best to do. If he is called, and the patient's delusions seem uncontrollable, he will give some emetic, and this may be followed by prostration and sleep, or he may give some narcotic that will produce sleep for a time. These persons are practically poisoned. It may be from spirits alone or excessive eating or both, in which the mind and body is most seriously damaged. They think wrongly, they act strangely, they have imperfect control of their muscles and their manner is so changed as to suggest insanity. Many families have skeletons of this kind and they call on certain persons to help them on such occasions and what to do and how to do it, are most distressing questions. The nurse should be very clear and decided in her work and under no circumstances show fear or timidity. In extreme cases, called delirium tremens, no matter how wild the delusions are, they shrink from the resolute, courageous force of an emphatic nurse. They will often obey a woman when they will oppose the same thing offered by a man. Often their immediate family have very little influence and it requires a stranger to break up and stop the obsession of the moment. Very commonly the delusion takes the form of violent, abusive language, particularly of those who are nearest to them, with wild threats. The more pronounced this is, the less likely it is to materialize. The nurse has little to fear from wild, boisterous talk; the patient soon recognizes that this mode of expression is useless and destroys his ability to have his own way. An authority of tone of voice and imperious, fearless manner breaks up the intensity of his thoughts and makes him willing to do what he is asked. A nurse should never argue or try to explain, but in the briefest manner acquiesce or deny the statements he may make. She must insist that he carry out her wishes in the taking of medicine and then manage to have the proper restraint to be applied without explanation. In extreme cases it is always wise to place

the patient in a hospital or have him in some available room in the house, with sufficient force, if necessary, for restraint. If the patient is to be under the exclusive charge of the nurse, the condition of poisoning must be recognized and not emetic drinks of salt water or mustard and water together with cathartics to be used at once. Hot applications to the feet and bathing the head in cold water is very available and soothing. After free vomiting and purging, restoration sets in, then acid or alkaline drinks may be given very freely. If the patient complains of great prostration, rubbing along the spine and back of the neck will frequently produce sleep. If the person is very nervous and restless, a hot water bath of the temperature of 98° or 100° should be given. This should be continued for an hour at a time, the temperature of the water being kept up to a uniform degree. To these baths soda or salt may be added in quantities from three to six pounds for each tub. This will depend upon the state of the skin. If it is dry and harsh, the soda in large quantities is required. If the skin is soft and sensitive, small quantities of salt, three or four pounds to the tub, will be very useful. When relaxation has fully taken place, the patient must be put to bed, wrapped up in blankets and given a large dose of carbonated waters, enough to dilate the stomach and wash out the intestinal track. A few hours later, a concentrated solution of hop tea, made palatable with lemon acid, should be given every two or three hours until sleep is produced. If the patient complains of hunger, toasted bread, cereals, nuts and small quantities of meat may be given. If the hops become very distasteful, small doses of sulphate of magnesia or epsom salts flavored with peppermint or wintergreen will be very grateful. This remedy can be given in ten or fifteen-grain doses for many days, and is literally a most excellent tonic as well as a sedative. If extreme nervousness follow, valerian pills of the size of three or four grains may be given at night and early in the morning. Tea and coffee are excellent stimulants, and, as a rule, are harmless, but much depends on the person. Sometimes a cup of black coffee is invaluable, but its usefulness will be greatly impaired by adding milk and sugar. Tea is about the same; cocoa is

much better, only it should be given only once a day. Fruits and fruit juices are excellent and in some cases decidedly helpful. There may be a craving for meats after the acute symptoms have passed by, but this should be restricted and varied with fish and fowl. The usual vegetables all have some building-up properties. Beer should not be used after spirits are abandoned. They contain ferments and the small quantity of alcohol they have always leads up to stronger spirits after a time. Sweet cider is better, but this cannot be used long without injury. During this acute period of recovery a wise nurse will add suggestion to her care. The patient will have periods of remorse. To intensify these is not helpful, because the reaction is certain to follow, but if one can direct these remorseful emotions into hopeful channels and a full realization of the necessity of a radical change and total abstinence from all forms of spirits, the best results may be expected. The patient needs education more than anything else. He needs to realize the damage from spirits and the delusions that they have been helpful in any way, broken up. The nurse can impress the patient's mind to make a supreme effort to change his opinions and actions and to recognize how far they are destructive. Signing pledges and promises may be very helpful to some persons, but in a certain proportion of instances, where these promises are broken, the condition mentally is worse. A certain number of persons will willingly carry out pledges for total abstinence for a definite time and pride themselves in the strength required to do this. At the end of the period, if they can be persuaded to renew this, they acquire new strength. It thus happens that many persons are held from giving way to their morbid impulses to take spirits until their system has regained its sufficient strength to overcome it. In other instances pledges are useless. Patients should be made to understand that all forms of alcohol are perilous and distinctly poisonous, and that they will always suffer from every degree of use. One class of persons have a very pronounced love of life and its pleasures, and if they can be made to see how far alcohol will diminish this, an element of fear may be grown and caution that will keep them from relapsing. Another class have

very little ambitions except those of the most selfish kind, such as the acquisition of money and the praise of their fellowmen. Another class are intensely bound up with family ties and love of home and children; still another class are reckless of the future and have no thoughts except the enjoyment of the present moment. All these are distinct mentalities, which the nurse can recognize and utilize in the application of physical measures. Many persons consider the emphatic denials of the possibilities of using spirits again, a most practical form of suggestion. This is not borne out by experience. Almost invariably persons who have taken the so-called treatments in institutions and are told that they never can take spirits again will experiment to see whether this is real or not. If this experiment is carried out under the direction of a physician, who wisely adds some nauseant to the spirits, the conviction may be deepened, but if it is attempted outside under favorable circumstances, the delusion that he can't drink will be dissipated at once. If he finds the first drink not quite as pleasant as formerly, he will repeat it to see whether the same taste exists or not. This is sure to return, and often with greater impetuosity than before. If the patient had been impressed at the beginning with the fact that spirits were more destructive than ever, that the desire and taste still remained and these could be overcome by various methods, he would rarely make an experimental test. Giving drugs secretly, hoping that they will destroy the desire for spirits, always fails, and a patient finds out that he has been drugged, and this forms the basis for delusions of persecution in the future. The success of treatment depends on frankness, not telling everything, but making the patient understand exactly what is to be expected. Persons who are afraid of cancer, of kidney disease, of apoplexy, can be told clearly to what extent the use of spirits increases the probability of these diseases coming on, and the suggestion here often become a very powerful factor. The nurse may be very helpful to the physician in observing moods and the inner hopes and ambitions of the patient which the physicians could not from time and other circumstances obtain. Occasionally, such persons will insist that some member of his family take care of

him when suffering from drink excesses, and this member should seek the counsel of a wise physician to know how to conduct his mental and physical disorder back to health again. In nearly all such persons there is a self-limitation in which nature brings about restoration, and the best possible treatment is mental. Patients themselves soon discover that purgatives of the saline class bring the quickest relief, or that Turkish baths or some other allied measures will enable them to become sober. For a time they may rely on these measures, but sooner or later they fail and something more is required. It is a very interesting question which must be answered in the future, as to how far the prohibition of alcohol as a beverage and stopping its manufacture and sale will check this army of drink and drug takers and drive them out of the community.

A research foundation has been organized in Hartford, Conn., to determine what causes back of spirits, force intelligent men and women to use this drug for all sorts of purposes. This will be one of the great studies of the future. At present there is so much confusion of theory and opinion that both physicians and nurses, can do little more than apply the best possible measures for the relief of the present conditions. It would be wise in every instance to take the advice of a physician in these concealed cases and have him direct the treatment through the aid of intelligent nurses. This could often be done with the greatest advantage, not only in these cases, but in others. Nurses should have some training in this field and schools of nurses should have someone to instruct them what to do in the home treatment of alcoholics and inebriates.

Selected Articles

THE CARE OF THE HEART IN PREGNANCY.*

TASKER HOWARD, M.D.,
Brooklyn-New York.

The subject for discussion tonight brings up the question as to who is the better qualified to care for the pregnant woman—the obstetrician or the internist. So far as the treatment of cardiac complications is concerned, I think it is evident that the obstetrician must frequently feel the need of turning to the internist for help, and that the internist who tries to settle all difficulties without expert obstetrical advice will often come to grief. If the responsibility had to be left with one man, it seems to me that the safest adviser would be a general practitioner of sound judgment, who had not only confined many women and treated many hearts, but who was thoroughly familiar with the patient herself and knew from long observation how much strain the woman's heart could be depended upon to bear. During the confinement itself, no doubt the specialist would be preferable. Hard and fast rules for guidance would perhaps nowhere find more exceptions than in the subject under discussion. Each case has to be considered strictly on its own merits.

The question as to what happens to the normal heart in a normal pregnancy is still under discussion. It is almost the rule to find an enlarged area of cardiac dullness as pregnancy progresses, and systolic murmurs, most typically at the base, but also at the apex, are frequently heard. These physical signs are interpreted by one school as being due merely to a crowding up of the heart by the enlarging abdomen. Others contend that a hypertrophy takes place, and Williams quotes Dreysel to the

*Read before the Brooklyn Society for Internal Medicine, Nov. 24, 1916.

effect that the hearts of seventy-six pregnant and puerperal women weighed 8.8% more than the hearts of normal women. The fact that these women came to autopsy would seem to indicate that they could not be considered normal pregnancies. However, there is considerable evidence that the heart has more work to do during pregnancy than during the non-pregnant state. Whether or not it responds to hypertrophy, the fact remains that weak hearts frequently give way to the strain in more or less degree. With or without local cardiac signs, there may occur such symptoms as dyspnoea, an undue degree of dependent oedema, or merely a sense of fatigue that are not attributable to toxemia, and that respond to measures directed to the circulation. Digitalis, strophanthus, and similar drugs relieve such patients, and, of course, from a practical standpoint, more important than any drug is sufficient rest. It may be necessary to put the patient to bed, or mere curtailment of her exertions may be sufficient.

In the management of chronic heart trouble, more serious problems arise. In the first place, should a woman suffering from chronic heart trouble be allowed to become pregnant? Take, for example, what is usually considered the most serious valvular disease from an obstetrical standpoint—mitral stenosis. Here no general rule can be laid down, but there are certain principles which may be borne in mind. If the disease is of recent acquirement, the heart having been damaged for less than two years, the future behavior of that heart is still a matter of uncertainty, and it would be the part of wisdom to advise the woman not to allow herself to become pregnant until it was shown that the heart muscle could fully compensate for the valvular defect. With a long standing mitral stenosis, if the patient has never suffered from broken compensation, and there are present no obstetrical contraindications (here the opinion of the expert obstetrician is clearly needed), the patient may be told that she runs but little added risk from her heart trouble, provided that she keep in constant touch with her adviser, and follows directions implicitly. She should be told that if during pregnancy there should occur the faintest sign of decompensation, it would

demand immediate attention, that she might have to go to bed and perhaps stay there a long time, but that with such precautions there would be but slight danger to herself, and a very fair chance of a healthy baby, in the hands of a skilled obstetrician. Then the decision may be left with the patient.

A patient with mitral stenosis, who has previously had such symptoms as shortness of breath or dropsy, should, as a rule, not be allowed to become pregnant.

For the less serious cardiac lesions the same advice would be applicable. The involvement of more than one valve, or the presence of adhesive pericarditis would contraindicate pregnancy, whether or not the patient had ever suffered a break in compensation.

If pregnancy has already begun when the heart patient seeks advice, the problem is complicated by a consideration for the life of the child. Here again one must individualize, and depend largely upon the past history as well as upon the present condition. The various heart lesions may as well be grouped together in this consideration, for it is the functional capacity of the heart, rather than any anatomical peculiarities, that is of importance.

If the pregnant woman has had repeated attacks of badly broken compensation, and her organs are all in a condition of chronic passive congestion, the chances are that she will abort in any event, and I do not believe that it is worth while to subject her to the very grave danger of advancing pregnancy, or the faint chance of securing a living child. In such a situation, the termination of pregnancy should be advised. It is sometimes very difficult, however, to decide whether a woman should be placed in this category, or should be treated expectantly.

A patient with a less serious past history, and yet with one or several definite breaks in compensation, may often with care be brought safely through the pregnancy and confinement. This means constant watchfulness, adequate and persevering cardiac therapy, and a readiness to advise intervention, should a cardiac decompensation prove intractable to milder measures.

Given the mildest type of valvular lesion in pregnancy—that is a heart which in spite of an evident anatomical anomaly, has

never shown any marked limitation in its field of response, how shall the possessor of such a heart be treated? During the early stages of pregnancy, much like a normal woman, with neither drugs nor rest. Her restrictions should be placed merely within the bounds of fatigue or breathlessness. Of course, she should be carefully watched for such symptoms as dyspnoea, dropsy, or weakness. Some limitations to comfortable exertion, of course, come to all pregnant women, but when they appear in the pregnant cardiopath they should be considered indications for more than ordinary restrictions in her activity, and if they are more marked than in the normal woman, she should be put to bed. Digitalis should be administered if the response to rest is not satisfactorily prompt. If taken in time these measures practically always suffice.

Toward the end of pregnancy, the heart should be fortified with small doses of digitalis, even though there have been no signs of breaking down.

The mortality of various heart lesions complicating pregnancy and parturition are given in figures of different observers, which are seen to be most violently incompatible, varying from .39 to 1 per cent to 100 hundred per cent. This variation is not surprising when we consider how utterly different may be two patients, both labeled, say, "mitral stenosis." It is most misleading to try to group them. Each patient constitutes her own class, and in determining what that class is, one should bear in mind the fact that, after all, the condition of the heart muscle, as shown by its function, past and present, is far more important than anything that can be learned by means of a stethoscope.—*Long Island Medical Journal.*

Extracts from Home and Foreign Journals

SURGICAL

ACUTE SYPHILITIC MENINGITIS.

BY BORIS BRONSTEIN, M.D.,
Odessa, Russia.

Bronstein considers that the term acute syphilitic meningitis should be more particularly applied to acute meningeal phenomena of the secondary period, sometimes preceding, but more frequently accompanying the cutaneous manifestations of this period. The pathology is essentially a meningovascularitis with hypersecretion of the cerebrospinal fluid. Prodromal symptoms, such as headache and insomnia, may or may not occur. Acute syphilitic meningitis at its height, as Bronstein says in the December *International Clinics*, presents the clinical picture of the tubercular form, differing from the latter by the indistinctness of the symptoms, such as contractures and stiffness of the neck, and by the absence of any marked disturbance of the pulse and respiration. In the luetic form fever is apt to be absent, and there may be remissions and relapses. Lumbar puncture reveals a considerable hypertension of the cerebrospinal fluid, albumin in quantity, and a marked lymphocytosis with plasmozellen. The cerebrospinal fluid may yield a positive Wassermann even when the blood serum is negative. Other manifestations of syphilis are to be looked for. The immediate prognosis is rarely fatal, but the ultimate prognosis should be reserved. Prophylactic treatment is recommended whenever the cerebro-spinal fluid shows a lymphocytosis, even when all meningeal symptoms are wanting. The treatment consists in frequently repeated removal of the cerebrospinal fluid in considerable amount, combined with intravenous injection of cyanide of mercury and intraspinal injections of colloidal mercury. Neosalvarsan or salvarsan have a

much more rapid action, but must be prudently handled in neurologic lesions of syphilis.—*International Clinics*.

CARREL'S SOLUTION.

"Dissolve in a large bottle 140 grams of dry sodium carbonate in 10 liters of sterile water. Add to this 200 grams of chlorinated lime (bleaching powder), and shake well. After half an hour siphon off the clear fluid into another bottle through a cotton plug or filter paper, and then add 40 grams boric acid to the clear fluid."

This solution is simply a solution of boric acid in solution of chlorinated soda (Labarraque's solution) and water. It can be made much more expeditiously as follows:

Solution of Chlorinated Soda

(U. S. P. IX.)	.....200 Gm.
Sterile Water	.....800 mls
Boric Acid	..... 4 Gm.

Dissolve. Keep in well-stoppered bottles, in a cool place, protected from the light.—*Journal American Pharmaceutical Assn.*

AN IMPROVED SUBSTITUTE FOR IODIZED CATGUT SUTURES.

Watson (*Surgery, Gynecology and Obstetrics*, November, 1916) has shown in a previous communication that a double salt of iodine possessed marked advantages over iodine for the impregnation of catgut sutures.

Potassium mercuric iodide in water and alcoholic solutions possessed more than ten times the germicidal efficiency of iodine.

Sutures impregnated with this double salt have a tensile strength 6.5 per cent greater than plain sutures, and 16.5 per cent greater than iodized sutures.

Sutures impregnated with the double salt, when sealed in tubes containing a suitable storing medium, show no deterioration when the tubes are subjected to boiling water.

The substitution of potassium mercuric iodide for iodine seemed to constitute such a distinct improvement in the preparation of antiseptic sutures that it was deemed desirable to develop a method for thus impregnating suture materials, and then to subject such products to exhaustive bacteriological tests. The experiments reported were planned to determine the efficacy of the procedure in producing sterile sutures, and the degree of antiseptic or germicidal powers imparted to such sutures by their impregnation with potassium mercuric iodide.

To this end, therefore, raw, dehydrated catgut sutures were treated with an alcoholic solution of this salt, placed in tubes with various storing fluids, and the tubes sealed. Heat sterilization was omitted in order to make the conditions of the test more exacting. All tests were controlled with samples of plain, chromic, and iodized catgut from several reliable manufacturers.

In conclusion the author states that potassium mercuric iodide is an improvement over iodine for the impregnation of suture materials in so far as their physical properties are concerned.

Sutures impregnated with potassium mercuric iodide possess a decidedly greater inhibiting power on the growth of bacteria than do sutures impregnated in the usual way with iodine.

The inhibiting action of potassium mercuric iodide sutures is a germicidal one.—*The Therapeutic Gazette*.

IMPROVED TOURNIQUET.

Sehrt presents arguments to show that collaterals develop better after ligation of an artery when the vein is ligated, too. Also that the tendency to gangrene is reduced when the venous blood is thus kept in the limb. He states that gangrene developed in 24.4 per cent of the legs in which the artery was ligated alone but only in 9 per cent when both artery and vein were ligated. In the arm, there was gangrene in 7.8 per cent with ligation of the artery alone and 0 per cent when artery and vein were both ligated. He ascribes the better outcome in the arm to the fact that the arm offers a much more extensive reservoir for the

venous blood than the leg. He gives illustrations of a kind of clamp with which it is possible to shut off the blood flow in the femoral or other main artery by compressing this artery, as a projecting part of the clamp compresses the artery alone, while the rest of the limb or abdomen is left practically untouched.—*The Journal of the American Medical Association.*

MEDICAL

CHRONIC DUODENAL INDIGESTION IN CHILDREN.

BY JOHN FOOTE, M.D.,
Washington, D. C.

This condition is said to occur most frequently in children after the first year, and especially in those who have suffered from dietetic errors, usually with antecedent contagious diseases, or from prolonged intestinal infections, and this is fully covered by Foote in the December *International Clinics*. This form of indigestion seems to be accompanied by deficiency or pancreatic ferments, especially lipase. A mild duodenitis, which either passes up the pancreatic duct, or diminished hormone formation, seems responsible for the condition. Diminished bile production may also be a factor. Anemia, loss of weight and mental underdevelopment occur. Large pendulous abdomens are common. Bottle feeding has been employed. Fever may be encountered, vomiting almost never. The number of daily stools varies from three to twelve. They are thin, contain some mucus and flakes of whitish material and have a very foul odor. They give an acid reaction and microscopically contain not only large quantities of fat soaps, but also a considerable amount of neutral fat, but rarely starch granules. It is to be differentiated from mesenteric tuberculosis and acute duodenal indigestion. The treatment consists in reducing the food elements which have proven indigestible, namely, the fat, and stimulating enzyme production by the administration of hydrochloric acid and pancreatic ferments.

TROPICAL DISEASES AND PUBLIC HEALTH.

Pellagra. F. R. Newman (*New York Medical Journal*). In the early stages of pellagra the symptoms are indefinite and misleading, but as the disease advances they become more pronounced. After careful clinical observation of several cases the author feels confident that the majority will be benefited by the following treatment: First, complete isolation. He regards the disease as communicative and would have patients confined in well-ventilated, darkened rooms with enameled furniture, including bed, chair and table. Doors and windows screened. Mop the floor daily with a strong solution of creolin. Sterilize all utensils, the urine, stools and sputum with chloride of lime. Control cerebro-spinal symptoms with bromides, chloral or gelsemium. For the persistent conjunctivitis and photophobia use loric acid, sodium chloride and rose water. Spray nose and throat often with weak solution of eucalyptol. Sponge skin lesions with permanganate of potash, 1:1000. If pus is present peroxide is useful. For the eruption he uses an ointment of tannic acid, sulphur, ichthyol and wool fat. Bathing in a strong solution of sodium chloride night and morning will relieve the persistent burning and itching of the hands and feet.—*Medical Progress*.

ALBUMINOUS URINE.

Does albuminous urine always indicate Bright's disease? Is Bright's disease, when present, always accompanied by albuminous urine? To both of the queries, the answer is No!

It is certain that some articles of food will cause some albumin in the urine. Osler and Bartholow both assert that albumin in the urine is transitory, and cannot be a proof of Bright's disease, provided there are no casts to indicate advanced kidney involvement. Albumin is present in various diseases; and yet not preceding diseased kidneys. Albumin was found in a case of '*mollities ossium*!'

The excessive use of too exclusively albuminous diet, such as eggs, has shown albumin in the urine. Any serious interference with the circulation, such as congestion, will show albuminous urine. It was found that the inhalation of 'arsenuated hydrogen and carbonic acid caused the urine to be albuminous. Albumin will be slight, and temporary, in exceptional cases, apart from dietetic errors. It is present in scarlet fever, typhoid fever, ague, diphtheria, pneumonia, peritonitis, traumatism, and acute articular rheumatism. It is also present in heart disease, abdominal tumors, cirrhosis, scurvy, pyemia, gangrene, and jaundice. Persons suffering from plumbism show it.

Finally, it must be carefully determined whether it is temporary, or persistent; or whether it is an evidence of renal disease!—*Charlotte Medical Journal*.

THE OCULOCARDIAC REFLEX WITH THYROID INSUFFICIENCY.

Petzetakis reports that in six persons with myxedema of varying degrees of intensity the reflex phenomena from pressure on the eyeball were enormously intensified over what is observed in normal persons. The hypothyroidism leaves the sympathetic without the normal stimulation from the thyroid. As a consequence, the antagonist nervous system gets the upper hand, and vagotomy results. He has induced a similar condition in dogs by nerve sections. Under thyroid treatment in one of his cases the lost balance was restored, and the oculocardiac reflex after a fortnight was about the same as in normal conditions. In two of the cases even light pressure on the eye for only two or three seconds arrested the heart's action for seven, eight, ten and fifteen seconds. Not a sound could be heard from the heart during this interval, even on auscultation. The young man in one case grew pale, stopped breathing and lost consciousness, but the pulse gradually resumed its course, and became quite normal by the end of the second minute. It was the general impression that if the compression had been kept up a few seconds longer the syncope would have been definite. In this case, under thyroid

treatment compression of the eyeball no longer induced syncope; it merely retarded the pulse to 20 or 25 beats per minute.—*The Journal of the American Medical Association.*

OBSTETRICAL

TWILIGHT SLEEP IN OBSTETRICS.

1. That scopolamine and morphine injections in the majority of cases diminish the pain of labor.
 2. That in about one-third of the cases amnesia is complete.
 3. That in a small proportion of the case active delirium is produced by the drug.
 4. That labor is prolonged.
 5. That the loss of blood in the third stage is increased, but that severe bleeding is not common.
 6. That no ill effects are produced in the mother.
 7. That the danger to the child is undoubtedly increased.
 8. That the dangers are lessened by constant and careful supervision.
 9. That the treatment should not be undertaken unless the patient's surroundings are favorable, unless the obstetrician is prepared to remain with his patient from the first injection until labor is completed, and unless skilled help is readily available, should operative interference become necessary.—*The Therapeutic Gazette.*
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CONSERVATIVE TREATMENT OF ECLAMPSIA.

Of thirty-five cases of convulsive toxemia, thirty-three mothers were discharged well, fifteen children were born alive and were discharged well, fourteen children were stillborn and six children died within a few hours after birth. This leaves a mortality in the series of 8.6 per cent and a stillbirth mortality of 40 per cent. All of these cases were true convulsive toxemias, having had one or more convulsions before admission, and all were treated in

approximately the same way. Immediately on entrance to the hospital, the patient's blood pressure is taken, a catheterized specimen of urine obtained and she is put into an isolation room which is darkened and as much quiet as possible obtained. She is then given by hypodermatic injection $\frac{1}{2}$ grain morphin sulphate, her stomach is washed out, 2 ounces of castor oil is poured down the tube at the end of the lavage and she is given a colonic irrigation of 5 gallons of 5 per cent glucose solution. If the blood pressure is over 175 systolic, phlebotomy is done and a sufficient quantity of blood is extracted to bring the pressure down to 150. The patient is now kept quiet and $\frac{1}{4}$ grain morphin administered every hour until the respirations drop to eight per minute. At this time convulsions have usually ceased, the patient will have fallen into labor, and, as has happened in practically all the cases, will deliver herself in a short time. Of the cases included, twenty-three were spontaneous deliveries, nine were delivered by low forceps, two by version and breech extraction, one breech presentation and delivery. All the patients in whom a fetal heart was heard on admission were delivered of living children, and in none of these were there any signs whatever of the morphin which had been administered to the mother.—*The Journal of the American Medical Association*.

POST-MORTEM CAESARIAN SECTION.

Harrar (*Edinburgh Medical Journal*, October, 1916) quotes an interesting article with conclusions as follows:

It is quite obvious that the death of a pregnant patient undelivered places her medical attendant in a delicate position, and this may easily become one of acute embarrassment if her relatives refuse permission for the section, which may be the only means of delivering the child within the six or seven minutes which is all the time that can be safely allowed to elapse after the maternal decease, if the infant is to have a fair chance of recovery. On the one side he may be faced with a peremptory refusal of permission, and on the other side he is responsible

for the life of the unborn child; further, he has no time for consultation and argument. The situation is certain to be a delicate one, but apparently he not only may, but he ought to, extract the child on his own and, it may be, on his sole responsibility, and, so far as statistics can give a guide, he ought to employ the Cæsarian section as the method of extraction. A further difficulty is that the death is usually sudden and may be also quite unexpected, and an added responsibility is now to be discovered in the possibility of an action for culpable negligence if surgical measures to deliver the child are not taken. Certainly no practitioner of medicine can afford to leave his conduct in such circumstances to be settled by resolutions formed for the first time in the presence of the emergency. If it were possible, the doctor's difficulties are added to when he is dealing with not a dead but a moribund pregnant woman.—*The Therapeutic Gazette*.

DISORDERS OF THE FEMALE BLADDER.

In the September, 1916, issue of the *Urologic and Cutaneous Review*, Robert B. Stewart, of Topeka, Kansas, discusses "Disorders of the Female Bladder," from the viewpoint of the general surgeon. Dr. Stewart points out that the element of pain, frequency of urination, and the presence or absence of blood and of pus in the urine must be considered in all forms of bladder irritation. In determining a diagnosis often an examination of the urine and subsequent cystoscopy will reveal a cystitis or a suppurative lesion of the kidney, wherein there are no symptoms directing attention to the bladder.

Cystitis is always a secondary process, and it is of the utmost importance to determine the primary cause. Cystitis which often follows the retention of urine in post-operative cases is not altogether due to catheter infection, but to the irritating effect produced by the residual urine. The administration of urotropin in sufficient doses to produce the physiological effect of the drug upon the bladder, given previous to operation, will do away with post-operative retention of urine. This is the first reference to

the employment of urotropin for this purpose which we are able to find in medical literature.

The various causes of hematuria and the sources of pus appearing in urine are discussed. The cystoscope is of the most vital importance in determining the source of hemorrhage and infection, and should be used in all cases wherein it is not directly contra-indicated.

Regarding the diagnosis of calculus, a stone in the urinary tract which is not of sufficient density to cast a shadow heavier than the surrounding structures on account of its porous formation, will readily absorb sufficient colorgol to render it easily visible on the radiogram.

Bladder tumors seldom occasion symptoms until the advent of infection which gives rise to hematuria and pyuria. These tumors are easily found by the use of the cystoscope, and the probability of their benign or malignant nature determined.

The one point which the author emphasizes is the vast importance of careful cystoscopic study as a routine procedure in all cases of women presenting symptoms of bladder irritation. For upon accurate determination of the cause in this class of cases alone depends the choice of suitable therapeutic measures which are to be employed.—*Medical Review of Reviews.*

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

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All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

PROHIBITION.

Our excuse for writing again on this subject is the fact that the United States Supreme Court has declared the Webb-Kenyon law constitutional. This decision furnishes food for thought, both of a retrospective and prospective kind.

Retrospectively we see how ineffective have been the prohibition laws passed by the different states; real prohibition has not been obtained, but instead, whiskey, brandy, gin and patent medicines have been substituted for beer and wines, and before the Harrison anti-narcotic law went into effect, dangerous narcotics were used to obtain the sensation and sense of well-being hitherto secured by alcoholic drinks. Moreover, a general disregard for laws of all kinds has crept in and the liquor question has become a more serious disturbing question in state and municipal elections than heretofore.

So, retrospectively we see that both the Harrison and the Webb-Kenyon laws should have been effective before a single state voted dry, and, furthermore, that the closed saloon and the bar should have been abolished before any attempt was made to abolish the products sold.

With these weaknesses of state-wide prohibition before us, prospectively, we see certain rational steps that should be taken before we try national prohibition. In our humble opinion these are as follows:

1. The Harrison law should be even more effective than at present; we have only to imagine national prohibition to realize

how difficult it will be for the anti-narcotic law to remain effective. Smuggling narcotics will be a highly lucrative business, and the recent feats of submarines, especially the Deutschland, should warn us that our coast patrol system will have to be greatly strengthened if the Harrison law is to be enforced in the face of national prohibition.

2. The pure food and drugs law should be made so stringent that no medicine containing alcohol could be sold without a physician's prescription. This would not only prevent the use of patent medicines instead of liquor, as in the past, but would help abolish that nefarious business.

3. The pharmacopeia should substitute aquas and fluid extracts for tinctures and fluid extracts wherever the nature of the drugs would permit. The effect of the drugs would not be lost and at the same time the latent craving for alcohol, which, unfortunately, is present in most individuals, would not be stimulated.

4. Prohibition states which still allow a certain amount of whiskey, beer, etc., per capita to be shipped into the state should change the law so that no alcoholic drink could be shipped into the state, and all states voting prohibition in the future should pass similar laws. Only in this manner can the Federal government know the real sentiment of the mass of people and so know when it would be for the best interest of all to pass a national prohibition law.

5. Federal licenses should not be sold in dry territory.

6. With the consent of the states—and it would be easy to obtain—the closed saloon and the bar should be absolutely abolished from the country. Drinks should be served only in cafes, restaurants and hotels, and *only at tables*.

7. Taxes on all intoxicating drinks should be increased, the increase to be made in a certain ratio to the percentage of alcohol. This would not only lower the general consumption, but would effect especially boys, young men and the poor working man, the classes especially aimed at by prohibition. It would also increase the governmental revenues.

8. Government requirements should be more exacting than at present, so that only *good* brandies, whiskies, wines, etc., are sold.

9. The Federal law against teaching the use of preventives in its effects indirectly cause the same evils that alcohol causes, and, moreover, is a potent cause of alcoholism itself. Therefore, this law should be repealed before we try national prohibition as a means of improving the nation.

10. A commission of disinterested scientists should be appointed to determine whether national prohibition at the present time would be for the best interest of the nation.

We must bear in mind the failure of state prohibition, the substitution of other stimulants for alcohol, the inherited desire for stimulants of those whose forebears have been drunkards or neurotics, and the real-innate desire for stimulants found in all races; we must not forget the disastrous effect of "firewater" on the American Indian, in whom heredity played but a small part, since their own intoxicating drinks were neither palatable nor potent; and we must consider the fact that with increasing knowledge and civilization temperance necessarily increases *pari passu* with increase in self-control, and that the increased temperance of our citizens today compared with their ancestors is not due as much to prohibition laws as to a natural evolutionary change.

Finally, the question each man must ask himself is whether it is better to train this self-control and, after after hedging the liquor monster around on all sides, let her die from starvation, as she surely will at no very distant time, or whether it is better to try to kill her outright and in her death throes give birth to other monsters a thousand times more dangerous and difficult to kill.

W. T. B.

DO YOU KNOW THAT

Efficiency decreases as fatigue increases?

The full pay envelope is the great enemy of tuberculosis?

A reliable disinfectant which may be made for 50 cents per gallon has been devised by the U. S. Public Health Service?

The maintenance of health is the first duty of the patriotic American?

Exercise in the open air cures and prevents many ills?
Typhoid fever is contracted by swallowing sewage?
Unpasteurized milk kills many babies?

OPPORTUNITY FOR YOUNG MEDICAL MEN—GOVERNMENT FILLING
VACANCIES IN PUBLIC HEALTH SERVICE.

According to a statement just issued by Surgeon General Rupert Blue, young medical men between the ages of 23 and 32 will be given an opportunity each month to demonstrate their fitness for admission to the grade of assistant surgeon in the U. S. Public Health Service. There are several vacancies in the government's mobile sanitary corps, which is now in the one hundred and nineteenth year of its existence, but in order to be recommended to the President for commission, a physical and professional examination must first be passed. As the tenure of office is permanent and the public health officers are ordered to duty in all parts of the world, they are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate. Boards will be convened at Washington, Boston, New York, Chicago, St. Louis, Louisville, New Orleans and San Francisco, but permission to take the examination must first be obtained from the Surgeon General. The examination is searching and includes, in addition to the various branches of medicine, surgery and hygiene, the subjects of the preliminary education, history, literature and the natural sciences. The commissions will be issued as assistant surgeon, and after four years of service the young officers are entitled to examination for promotion to the grade of passed assistant surgeon, and after twelve years of service to another examination for promotion to the grade of surgeon. The annual salaries are: Assistant surgeon, \$2,000; passed assistant surgeon, \$2,400; surgeon, \$3,000; senior surgeon, \$3,500; assistant surgeon general, \$4,000. When the government does not provide quarters, commutation at the rate of \$30, \$40 and \$50 a month, according to grade, is allowed. All grades receive longevity pay, that is,

10% in addition to the regular salary for every five years until the maximum of 40% is reached. When officers travel on official duties they are reimbursed their actual traveling expenses.

Editor The Journal of Medicine and Surgery, Nashville, Tenn.:

DEAR SIR—The second examination to be given by the National Board of Medical Examiners will be held in Washington, D. C., June 13, 1917. The examination will last about one week.

The following states will recognize the certificate of the National Board: Colorado, Delaware, Idaho, Iowa, Kentucky, Maryland, North Carolina, New Hampshire, North Dakota and Pennsylvania. Favorable legislation is now pending in twelve of the remaining states.

A successful applicant may enter the reserve corps of either the army or navy without further professional examination, if their examination papers are satisfactory to a board of examiners of these services.

The certificate of the National Board will be accepted as qualification for admittance into the Graduate School of the University of Minnesota, including the Mayo Foundation.

Application blanks and further information may be obtained from the secretary, Dr. J. S. Rodman, 2106 Walnut Street, Philadelphia.

We will appreciate a notice of this coming examination in your journal.

Very truly yours,

J. S. RODMAN,
Secretary.

BOERHAAVE.

A clergyman living near Leyden was the father of thirteen children. The eldest, born December 31, 1668, was Herman Boerhaave, accounted by many the most famous physician not only of the eighteenth, but probably of any, century. He died of gout in 1738.

He was an indefatigable teacher, sometimes lecturing five hours a day to his students at Leyden. He was the first to give

separate lectures on ophthalmology (the science of diseases of the eye) and to use a magnifying glass in the examination of the eye. He combined with a desire to study disease at the bedside, a freedom from theoretical and philosophical influence which led him to use the most modern diagnostic apparatus which he could secure. He was so famous that a Chinese official once sent him a letter addressed simply, "To the most famous physician in Europe." His maxim was "simplicity is the seal of truth."

The modern diagnosis of disease aims to employ every method which will reveal the exact mental and physical condition of the patient. Psycho-analysis will reveal the depths of the patient's mind almost as clearly as the X-ray shows the broken bone hidden beneath the body tissues. The pressure of the blood against the vessel walls may be accurately measured and appropriate means taken to ward off an apoplectic attack. The bodily excretions may be analyzed and the efficiency of the excretory organs determined. Special apparatus permits the examination of the eye, the ear, the nose, throat, bronchi, and the interior of various other parts of the body. Nothing is taken for granted; the blood is examined; the activity of the stomach is estimated; the validity of the nervous system is looked into. The modern physician finds the disease before he treats it.

Accurate diagnosis is of importance to the public health because an early and correct knowledge of the presence of a disease affords opportunity to prevent its spread. The case of tuberculosis which is found early has an infinitely greater chance of recovery than the one which is found late. Boerhaave recognized these facts in a general way and applied them; in fact, according to Rohlf's, he was the first who made a chemical examination of some of the bodily excretions.

Reviews and Book Notices

The Newer Methods of Blood and Urine Chemistry, by R. B. H. Gradwohl, M.D., Director of the Pasteur Institute of St. Louis and the Gradwohl Laboratories, St. Louis, and A. J. Blaivas, Assistant in the same; sometime Technician in Pathological Chemical Laboratories, New York Post-Graduate Medical School and Hospital; and Former Assistant, Chemical Laboratory St. Luke's Hospital, New York City. With Sixty-five Illustrations and Four Color Plates. St. Louis, C. V. Mosby Company, 1917.

We feel sure that the profession will be pleased with this new claimant for favor, inasmuch as it supplies a reliable guide for the character of investigation becoming very day more employed by physicians in their daily practice. It is simply a condensation in book form of information scattered through current medical literature and in this form made available for the everyday work of the practical physician. Only one method is given for each test, as the authors know what the majority of workers along this line judge the best test to be. We feel sure the book will prove a handy *vade mecum* for physicians, and that it will be generally adopted as a guide to every-day laboratory work.

Department of Commerce, Bureau of the Census. Sam L. Rogers, Director. Mortality from Cancer and Other Malignant Tumors in the Registration Area of the United States, 1914. Washington Government Printing Office, 1915.

We are in receipt of this valuable compilation and would call the attention of the profession to its importance as an index to the terrible ravages in this country of this scourge of humanity. The accuracy and thoroughness with which the work has been done is unquestionable and the statistics are so terrifying as showing the menace of the disease that we have no doubt the search into the causes, the prevention and the treatment of cancer will be wonderfully stimulated to increased efforts in the study of this disease.

Handbook of Suggestive Therapeutics, Applied Hypnotism, Psychic Science. A Manual of Practical Psychotherapy, Designed Especially for the Practitioner of Medicine and Dentistry, by Henry S. Munro, M.D., Omaha, Nebraska. Fourth Edition, Revised and Enlarged. St. Louis, C. V. Mosby Company, 1917.

Our thanks are due the enterprising publishers for a copy of this interesting and practically useful book, which is presented in its fourth edition, with careful revision and considerable additions. The author deals with a subject that is claiming more and more of the practitioner's attention. Psychotherapy enters largely into the every-day treatment of disease and is used consciously or unconsciously by the practitioner in the management of every patient he has in charge. Many useful, practical hints are given and the technique of the method is fully demonstrated. We unhesitatingly recommend the book to physicians, as it contains much that will interest and instruct them in the art.

Progressive Medicine—A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, *Materia Medica* and Diagnosis in the Jefferson Medical College, Philadelphia, Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. Vol XX, No. 1. Whole Number 73. March 1, 1917. Owners and Publishers, Lea and Febiger. Philadelphia, New York. Six Dollars per Annum.

Our thanks are due the obliging publishers for this very interesting number of a valuable serial. This quarterly publication occupies a place peculiarly its own and appeals to the busy practitioner as a storehouse of useful information, the pickings of up-to-date literature in condensed form selected by a corps of contributors who know how to separate the grain from the chaff. The contents of this number are as follows:

Surgery of the Head and Neck, by Charles H. Frazier, M.D.; Surgery of the Thorax, Excluding Diseases of the Breast, by George P. Muller, M.D.; Infectious Diseases, Including Acute Rheumatism, Croupous Pneumonia and Influenza, by John Ruhrah, M.D.; Diseases of Children, by Floyd M. Crandall,

M.D.; Rhinology, Larygology and Otology, by George M. Coates, A.B., M.D.; Index.

Each section represents in its text the last word upon the subject of which it treats, and is a mine of useful knowledge ready for use. The progressive practitioner can not do better than by becoming a regular subscriber to this excellent periodical.

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Publisher's Department

"Solution of Albuminate of Iron" (Liquor Ferri Albuminatis, Flexner). Contains 13% Alcohol. Each teaspoonful of this preparation represents one grain of Dry Albuminate of Iron in permanent solution. A most valuable form of Iron Tonic. Prepared by Robinson-Pettet Co., Incorporated, Louisville, Ky. (See page — this issue.)

Sanmetto is a mild, non-irritating diuretic, which allays urinary irritation and increases urinary secretion. It is thought of in prostatitis, pyelitis, purulent or catarrhal cystitis, irritable condition of the bladder, gonorrhea, enuresis in children, and in fevers where a mild diuretic is desirable to increase the secretion of urine. Sanmetto has been used by thousands of physicians in old men with irritable bladder and difficult urination, and they have found in a very satisfactory medicine. It is safe and harmless, and by its soothing action on the mucous membrane of the bladder, it relieves the irritation and adds greatly to the comfort of the patient. It increases the flow of urine, lessens the specific gravity, clears up cloudy urine, and relieves undue acidity. In all these ways it is of great benefit to the patient. In enlarged prostate it has done good service by its soothing qualities while reducing the enlargement.

CHRONIC CARDIAC DISEASE.

The patient with organic heart disease needs constant attention to his digestion and nutrition. A little falling off in the general vitality and the compensatory status of the heart may be lost forever. At the first sign of nutritional decline, therefore, Gray's Glycerine Tonic Comp. should be given. This dependable tonic braces a wavering organism by reinforcing weakened func-

tions. Thus it not only directly contributes to cardiac power, but what is vastly more important, materially, reduces the stress under which a feeble heart constantly has to labor. In other words, while increasing the carrying power of the heart, it also decreases the burden.

THE INTEROL TREATMENT OF CHRONIC CONSTIPATION IN THE ELDERLY

is rational. It fills one want, in a harmless and effective way, namely, the want of colonic lubrication.

While lubricating, it also acts beneficially by softening—or, rather, by keeping soft—the intestinal contents, and by protecting any bare spots in the tract. Finally, it combats the accompanying auto-toxemia by sluicing out the feces with their toxins, as is evidenced by the improvement in complexion and in general well-being shown by many of these patients after steadily using INTEROL.

All this is done without enervation to an already weakened organism.

Is there any one thing at the physician's command that will do as much for these patients?*

IN SCARLET FEVER AND MEASLES

there is no procedure that will contribute so markedly to a patient's comfort and well-being and at the same time prove so serviceable from prophylactic standpoints, as anointing the whole body at frequent intervals with K-Y Lubricating Jelly (Reg. U. S. Pat. Off.). Itching and irritation are relieved at once, and while the activity of the skin is maintained, the dissemination of infectious material is also prevented. So notable are the

*Further literature on this subject on request. Van Horn & Sawtell, 15-17 E. 40th St., New York City.

benefits that result from the use of this non-greasy, water-soluble and delightfully clean product that its use has become a matter of routine in the practice of many physicians. In addition to being "the perfect lubricant," K-Y has also been found an ideal emollient, and in no way does it demonstrate its great utility more convincingly than in the care of the skin during the exanthematous affections. Van Horn & Sawtell, 15-17 East 40th Street, New York City, and 31-33 High Holborn, London, England.

TONGALINE

"Having devoted especial attention to the treatment of chronic diseases, I think I can attribute a large part of what success I have had to the strict attention I have always given to the matter of elimination. A large percentage of such diseases have as a main factor autointoxication and the retention of morbid waste matters nature fails to expel."

Tongaline, by its stimulating action upon the liver, the bowels, the kidneys and the pores is the *ideal eliminative* and its use will invariably be attended with satisfaction to the physician and the patient.

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Original Communications

APPENDICITIS COMPLICATING PREGNANCY.

BY AIME' PAUL HEINECH, M.D.,

Professor of Surgery, Chicago College of Medicine and
Surgery, Chicago.

Appendicitis attacks all ages and both sexes. Though distinctly a surgical disease, it is also of great practical interest to gynecologists, obstetricians and general practitioners.

The frequency of appendicitis in the female pregnant or non-pregnant is underestimated and its significance not fully appreciated. It is often overlooked, misdiagnosed and therefore improperly treated. The autopsy findings often bring the first intimation of the true cause of the clinical picture.

To serve our fellow practitioners, we collected, analyzed and studied the original reports of all the operated cases of appendicitis occurring during pregnancy, that are to be found in the French, English and German medical literature from 1900 to 1915, inclusive, and also some unpublished personal cases. Cases reported with insufficient data were not considered.

The subject will be discussed under the following sub-heads :

1. Incidence.
2. Etiology.
3. Combined appendicitis and extra-uterine pregnancy.
4. Pathology.
5. Co-existing conditions.
 - Influence of pregnancy upon appendicitis.
 - Influence of appendicitis upon pregnancy.
6. Diagnosis.
7. Differential diagnosis.
 - (a) Maternal.
 - (b) Fetal.
8. Prognosis.
9. Treatment.
 - (a) Prophylaxis.
 - (b) Indication for operation.
 - (c) Operative.
10. Post-operative sequelæ.
11. Summary.

INCIDENCE.

During the child-bearing age, woman is at no time exempt from attacks of appendicitis. In forty-six of our selected cases, the age is not stated. The remaining patients were at time of operation :

Under 18 years.....	3 cases.
18—20 years, inclusive.....	13 cases.
21—25 years, inclusive.....	33 cases.
26—30 years, inclusive.....	42 cases.
31—35 years, inclusive.....	23 cases.
36—40 years, inclusive.....	12 cases.
One patient forty-two years.	

The condition occurs in primiparæ and multiparæ ; in first early and late pregnancies ; in single and twin pregnancies. Appendicitis can coexist with other disease processes to which it may be primary, secondary or coincidental.

In the cases forming the basis of this article, there are noted thirty primiparæ, twenty deutiparæ, thirty-seven multiparæ.

The number of previous pregnancies, if there were any, is not stated in eighty-three cases. Appendicitis occurs at all periods of gestation. In some cases the disease antedated pregnancy; some cases were operated early with reference to onset of symptoms; some late. It is recorded that operation was indicated and performed:

During the first 3 months of gestation-----	40 times
From 4—6 months, inclusive-----	28 times
From 7—9 months, inclusive-----	28 times
Period of gestation not stated-----	45 times

ETIOLOGY.

The etiology of appendicitis in a pregnant woman is the etiology of appendicitis in the non-pregnant woman. It is the belief of many clinicians that gestation does not exert any influence, good or bad, upon the normal appendix.

Appendicitis is primary or secondary; it may be secondary to disease of the uterine adnexa just as inflammatory diseases of the tube and ovary may be secondary to an appendicitis. Recurrent attacks of appendicitis may be precipitated by pregnancy, labor or puerperium. Pregnancy can provoke acute inflammatory disturbances in an appendix bound down by dense adhesions or containing a foreign body, one or more feces concretions, or worms. The appendicitis complicating pregnancy may be the patient's first attack. It may have been preceded by one, two, three or more attacks of greater or less severity.

COMBINED APPENDICITIS AND EXTRA-UTERINE PREGNANCY.

In some of the reported cases in which appendicitis and ectopic pregnancy were associated, it was not determined which of the two conditions antedated the other; which was primary and which was secondary.

When an appendicitis precedes a tubal pregnancy in which it apparently plays an etiological role, the anatomical changes frequently evolve as follows:

1. Appendicitis.
2. Peri-appendicitis.
3. Peri-adnexitis.
4. Formation of inflammatory adhesions interfering with tube mobility and tube function and producing tubal malformation.
5. Tubal pregnancy.

All these conditions favor the ectopic implantation of fertilized ova. Appendicitis may hasten tubal abortion through local infection, through general intoxication, may lead to suppuration of hematoceles of fetal cysts.

To differentiate appendicitis from extra-uterine pregnancy is at times difficult. In the unruptured state, the pregnant tube gives symptoms analogous to those of chronic appendicitis. An infected hematocele presents the signs of suppurative pelvic peritonitis. Peritoneal hemorrhage due to a ruptured tubal gestation sac has symptoms closely resembling a diffuse septic peritonitis. Positive Abderhalden test, absence of fever, vaginal hemorrhage, symptoms of internal hemorrhage will point to tubal pregnancy. It is interesting to make an exact diagnosis, but as both diseases are surgical affections exposing mother and fetus to serious dangers, the watchword in both conditions should be early operation. Appendicitis calls for prompt operative treatment; extra-uterine pregnancy is an emergency condition calling for immediate ablation of the ectopic fetal sac.

In all the cases of appendicitis and extra-uterine pregnancy herein considered, twelve in number, operation gave excellent results. The findings differed in nature and consequently the operative procedures varied in extent in the different cases.

PATHOLOGY.

Acute and chronic inflammations of the appendix involve the organ, in part or in its entirety, and are associated with catarrhal, fibrinous, sero-fibrinous, sero-purulent, or purulent exudates present in the cavity of the appendix, in its walls, or around it. The inflammatory process may be limited to the mucous mem-

brane, may involve part of, or the entire thickness of the appendical wall.

The appendix vermiformis may be partly or wholly intra- or extra-peritoneal. A retro-peritoneal or extra-peritoneal appendix the seat of suppurative inflammation gives rise to retro-peritoneal or extra-peritoneal pus collections. Adhesive inflammation may lead to permanent fixation of the appendix, to one or more abdominal viscera normal or pathologic, to the abdominal parietes, or to both. Inflammatory adhesions involving the tube, may angulate it, constrict it; may interfere with tubal mobility and tubal function; may change its course and play a fairly important role in the etiology of sterility. The appendix, during a 280-day pregnancy, may touch every organ of the abdomen. Pus in quantities, large or small, may be present within the cavity of the appendix, in its wall or around it. Acute suppurative inflammation of the uterus and tubes may be set up by direct extension from an acutely inflamed appendix. The walls of appendiceal or peri-appendiceal abscesses are formed in part by one or more of the following organs: uterus, adnexa, omentum, intestine, small or large, etc. An appendicular abscess may bulge into the posterior cul-de-sac, may open spontaneously into the uterus, vagina, rectum.

The inflammation proceeded to the state of gangrene in twenty-four cases; in eleven of these cases one or more perforations were present. The gangrene may be limited to the mucous membrane, may affect the entire appendiceal wall or the entire organ. Any part of the organ, tip, middle, base, may be gangrenous. Fecal concretions, one or more, were present in thirteen appendices. It is easy to understand how inflammation migrates from the appendix to the Fallopian tube, to the pregnant uterus, etc. Pelvic inflammatory processes extending by continuity or contiguity of tissue, occur in the pregnant as well as the non-pregnant. Distal pus collections are due to metastases by way of the lymph or blood channels. In the ulcerative type of inflammation the ulcer extends in depth and in surface area; when all the coats of the appendix have been burrowed through, a perforation re-

sults. The apex, the base, or any other part of the appendix may be the seat of perforation.

CO-EXISTING PATHOLOGICAL CONDITIONS.

Co-existing pathological conditions are primary or secondary to the appendiceal inflammation or merely coincidental, bearing no relation of cause or effect to it. It is not uncommon for appendicitis in the female to be complicated by or associated with tubal and ovarian diseases; salpingitis, pyosalpinx, hydrosalpinx, ovarian abscess, tubo-ovarian abscess, parametritis, etc. Close anatomical association of the appendix with the uterus and the adnexa explains the frequent simultaneous involvement of these organs in disease processes.

INFLUENCE OF PREGNANCY UPON APPENDICITIS.

Upon a normal appendix, gestation has little or no influence. Upon an appendix, the seat of previous or latent disease, pregnancy exerts an unfavorable influence. It can intensify an existing inflammation. It may cause a previous inflammation to recur. In view of this possibility, many of our best clinicians recommend and practice the removal of the appendix in women married or about to be married who have had one or more attacks of appendicitis non-operatively treated.

The pregnant uterus as it ascends in the abdomen commonly displaces the cecum and the appendix from below up, from right to left and from behind forward. In enlarging, the uterus may stretch existing inflammatory adhesions; it may displace, twist, and kink the appendix and thereby whip into activity latent appendicular infections. Pregnancy is a serious complication of appendicitis. 1. When the appendix is adherent to the uterus. 2. When it is the seat of an inflammation, perforative, gangrenous or suppurative in type. 3. When its inflammation leads to abscess formation, near or distal. 4. When the uterus forms part of the wall of an appendicular, peri- or para-appendicular abscess. In the afore mentioned conditions, adhesions may be torn, abscesses may be ruptured by the enlarging uterus.

INFLUENCE OF APPENDICITIS ON PREGNANCY.

Appendicitis is a menace to the mother's life, it is a menace to the gestation. The danger increases with the advance of gestation and is most marked after the fourth month. Infection can and does spread from the appendix to the genital organs by way, 1. Of the peritoneum (localized or diffuse peritonitis). 2. Of the appendiculo-ovarian ligament. 3. Of adhesions existing between the uterus and a perityphlitic pus focus. 4. Of the Fallopian tube.

Even a mild case of appendicitis may lead to a plastic peritonitis closing permanently the lumina of both tubes. From inflammatory adhesions may result dysmenorrhea, subinvolution, sterility through inflammatory closure of tubal ostia, habitual abortion, extra-uterine pregnancy, a tendency to uncontrollable vomiting, etc.

Appendicitis in the pregnant state may or may not terminate pregnancy. The prognosis is good as to non-interruption of pregnancy. 1. When the appendix does not hang in the small pelvis. 2. When the inflammation is limited to the appendiceal mucosa. 3. When it does not extend beyond the appendiceal wall. 4. When the appendiceal abscess or peri-appendiceal abscess is small.

Premature termination of gestation either by fetal death, fetal expulsion or both may be caused by, 1. Sequels of previous appendicitis, acute or chronic; inflammatory adhesious, old or recent, preventing uterine expansion. 2. Infection from the appendix extending through the tubes to the uterus and its contents. 3. Infection reaching the placenta through lymphatic and vascular channels. 4. Metastatic inflammation of the placenta, disturbing its circulation. 5. Local irritation. 6. Fatal effect of hyperpyrexia upon ovum.

The further pregnancy is advanced the greater the danger of abortion after operation. The chance of abortion after early operation is very small indeed, for the operation is then done before an extensive inflammation has involved the uterus or an abscess rendered the patient septic. Tendency to abortion is small in clean cases as in this type the operative manipulation is reduced to a minimum.

In 173 cases of appendicitis herein studied it is stated that abortion was artificially induced nine times and occurred spontaneously forty-nine times. Cæsarian section was performed four times, abdominal one, vaginal three.

In eighty-three cases, pregnancy was not interrupted by the operation. In seventeen cases no definite statement is made.

DIAGNOSIS.

Appendicitis is not as frequently misdiagnosed as formerly. Increased familiarity with the condition enables us to make an earlier and a more timely diagnosis. It is an established fact that the morbidity and mortality of this disease can be lessened if it be diagnosed and operated before the advent of complications, perforations, gangrene, abscess formation, peritoneal involvement, etc. The diagnostic difficulties increase with the advance of gestation and persist during the puerperium.

The symptomatology of appendicitis in the pregnant is the symptomatology of the disease in the non-pregnant. Nevertheless, the recognition of the condition is made more difficult by various factors. One or more of the cardinal symptoms may be lacking. The symptoms and signs may not be sufficiently pronounced to lead to careful investigation or may be classed among the various disturbances incident to pregnancy.

During pregnancy the abdominal walls are on the stretch; they lack the softness and pliability so essential to careful and satisfactory abdominal palpation. In very fleshy patients, palpation does not give definite findings.

The seat of pain though always corresponding to the site of the inflamed appendix, may be abnormally high. The leukocyte count gives uncertain findings; at best, it has only relative or corroborative value.

Mistakes are less likely to occur by keeping in mind (a) that every pregnant woman is to be examined for physical defects. (b) That the history is all important; ask about previous attacks. (c) In gravid women, all attacks of indigestion associated with vomiting and fever should arouse suspicion and command a careful examination of the abdomen. (d) Right iliac pain unassociated

with uterine contractions should lead one to think of appendicitis. (e) Deep seated retro-cecal and other abscesses may be detected by rectal examination. (f) Peri- or para-typhlitic abscesses may be detected by vaginal examination.

In a pregnant woman, acute abdominal pain of a sudden onset, at first diffuse and then remaining localized to the right iliac fossa, suggests appendicitis; more so if the patient gives the history of previous attacks.

DIFFERENTIAL DIAGNOSIS.

During gestation many conditions simulate appendicitis. As most of these conditions demand operative relief, the resulting diagnostic mistakes are embarrassing and humiliating to the surgeon, but not commonly disastrous to the patient. In adnexal disease the pain and the objective findings are most always bilateral, while in appendicitis they are unilateral and the pain, as a rule, is more acute. Non-ruptured right tubal pregnancy simulates and is frequently diagnosed chronic appendicitis. Rigidity and tenderness over McBurney's point are seldom marked in extra-uterine pregnancy. Intelligent interpretation of the clinical history and of the objective findings, furnished by a careful and thorough abdominal, rectal and vaginal examination helps one to arrive at a correct diagnosis. Abscesses in the pouch of Douglas, due to perforative appendicitis, have been wrongly attributed to primary uterine and tubal infection; right-sided parametritis, due to the spreading of a retro-colic appendicitis, has been diagnosed ordinary puerperal infection.

In pyelitis, uteritis, ureteric calculus of the right side one is guided by the urinary symptoms and findings. Hepatic colic has a sudden onset with pain in the right upper abdominal quadrant; this pain radiates toward the right shoulder and is usually apyretic. The pain of nephritic colic descends and radiates toward the external genitalia. In fecal impaction, the symptoms are less severe and yield to colonic injections and to laxatives.

In advanced pregnancy, the differential diagnosis between appendicitis and cholecystitis may prove difficult owing to the associated upward displacement of the cecum and appendix by the pregnant uterus.

(To be continued.)

Extracts from Home and Foreign Journals

SURGICAL

LOCAL ANESTHESIA IN SURGERY OF THE COLON AND RECTUM.

Beach's conclusions fully detailed in the International Clinics for March on the subject are as follows:

First: Eliminating terrorism associated with operations under general anesthesia.

Second: Absence of postoperative distress and complications.

Third: The anesthesia is complete, thoroughly blocking the field, thus preventing shock.

Fourth: It persuades the patient to undergo an operation because the detention from business is shorter and postoperative pain is less.

Fifth: Skill in technic is achieved by virtue of the surgeon's care in gentle handling of a conscious patient.

Sixth: It will teach him to handle tissues more deftly in general anesthesia, realizing that much pain and tendency to infection follows tearing and mutilating of soft parts.

Seventh: Local anesthesia conserves the patient's peace of mind, as there are many who will testify to its efficiency and complete relief with so little inconvenience.—*Wm. M. Beach.*

TREATMENT OF EPITHELIOMA BY RADIUM.

The writer emphasizes the fact in the International Clinics with many photographic illustrations that in each case the proper form of radiation and dosage for each case must be carefully determined.

Four classes of epithelioma are to be considered:

First: The lesion which can be cured by one application of radium with the proper dosage.

Second: The lesion which is so situated that glandular involvement is likely to take place or has already occurred and the roentgen ray should be employed as an adjunct to treat adjacent glands.

Third: Those cases in which the local application of radium supplemented by the roentgen ray will only act as a palliative measure.

Fourth: Those cases in which excision is justified to be followed by radiotherapy.

Professor Boggs believes that radium and the X-ray should always be considered first in the treatment of epithelioma, because, when properly applied, practically all epitheliomatous tissue can be made to disappear and there are fewer recurrences than by any other method. In order to apply the method, however, the operator must have the requisite clinical experience with these growths as well as a knowledge of the use of the agents employed.

Inoperable cases in which the tonsil is involved are often markedly improved so far as symptoms are considered.—*Russell H. Boggs.*

SYPHILIS AS AN ETIOLOGICAL FACTOR IN LAENNEC'S ATROPHIC CIRRHOSIS OF THE LIVER.

Symmers in a study of atrophic cirrhosis of the liver in the International Clinics concludes that alcohol plays a secondary role in the etiology of atrophic cirrhosis of the liver. A certain percentage of the cases conform to the type described by Laennec. In this group syphilis is the primary etiological factor, and alcohol, if it enters into the process at all, is contributory, and not essential.—*Douglas Symmers.*

"AMBRINE" TREATMENT FOR BURNS.

A most interesting story of the "ambrine" treatment for burns received by soldiers in the European war appears in the *New York Medical Record* of January 27. It recalls a talk recently

given in this city by Mr. Cyril Maud, an English actor, who plays the title role in "Grumpy," who stated the facts as written him by a friend who had seen the marvelous results accomplished by this treatment.

Though used by its discoverer, Dr. Barthe de Sandford, whenever occasion seemed to him to demand, since early in the nineteen hundreds, it was another case of "a prophet is not without honor save in his own country," for it never until recently received the recognition which it merited. Through results obtained and the influence of friends, the French War Office has at last learned the worth of this treatment and not only orders soldiers suffering from burns to be sent Dr. de Sandford, when possible, but has also established the treatment in the front line hospitals. This is imperative for the best results, as the cure is more of a success when received shortly after the injury. In numberless cases, the burns have not only been cured, but the surfaces restored to their normal state.

"Ambrine" seems to have received its name from its amber hue. de Sandford is said to have made its discovery in an effort to find a home treatment as a substitute for the hot mud bath treatment for rheumatism. After a number of experiments, he decided upon combining paraffin with the resin of amber, which, when melted together and applied hot, made a firm bandage, affording relief. Its application in the cases of the war burns gives immediate relief from the agony which it almost sickens one to witness. The ambrine is applied hot (we understand at 158 degrees F.) in small quantities. Over this is placed a thin layer of gauze and on top of this is placed more ambrine. After twenty-four hours, this is removed *en masse*, and after treatment of the burnt surface, another application made. Healing is comparatively rapid and, as previously stated, results are said to be marvelous. Cures have been known to result in burns of such severity that death would under ordinary circumstances have been expected.—*Virginia Medical Semi-Monthly*.

MEDICAL

THE RELATION OF THE HYPOPHYSIS TO CERTAIN CLINICAL MANIFESTATIONS AND THE THERAPEUTIC APPLICATION OF THE EXTRACTS.

Miller in the *American Journal of the Medical Sciences* for October, 1916, writing a paper on this subject, says that mention should be made of the use of posterior lobe extracts in the treatment of bronchial asthma. On account of pituitrin having an effect on blood-pressure somewhat resembling adrenalin, several publications have appeared recommending its use in bronchial asthma. This is apparently wrong. Pal, Frohlich and Pick, Baehr and Pick, and others have shown that pituitrin produces bronchial spasm, while the relief given by adrenalin is due to its power to dilate the bronchi. Baehr and Pick have also shown that when combined with adrenalin the pituitrin action on the bronchi is inhibited by the adrenalin.—*The Therapeutic Gazette*.

A NEW DIAGNOSTIC SIGN IN TYPHOID FEVER.

As long as human nature remains what it is, says the *Medical Record*, so long will physicians experience the temptation to astonish the families of their patients, and even their own colleagues, by "snap" diagnoses. The length, for example, to which diagnosis by the facies can be carried is amazing to the uninitiated. It is a matter of every-day experience for the doctors on duty at Ellis Island to stand watching immigrants file past them by the thousand and to pick out of the lines, guided solely by the expression of their faces, men suffering from heart disease, kidney disease, and even hernia. This facility can, of course, only come with constant practice, but there are many signs in ordinary diseases by means of which a physician is often able to anticipate the diagnosis, although he is careful not to rely upon them to the exclusion of laboratory confirmation. Some-

times these signs, moreover, are lauded too enthusiastically by their discoverers as being pathognomonic; later it is found that they may occur in so many other conditions that they are perforce relegated to the cobwebby limbo of medical curiosities.

Whether or not such will be its fate, a new sign for typhoid fever, called the "crossed-hip reflex," has been discovered by an English physician, Dr. E. B. Gunson, who describes it in the *Lancet* of September 16, 1916, as follows: "When the quadriceps femoris muscle mass is firmly grasped just above the knee between the thumb and fingers the patient experiences considerable pain referred to the site of stimulation, and there occurs flexion at the hip joint and extension of the great toe of the opposite limb. The reflex may be incomplete, and consist of flexion at the hip only or flexion at the hip and contraction of the tensor fasciæ femoris muscle without actual extension of the great toe; crossed extension of the great toe without flexion at the hip occurs in some cases. Pain on stimulation is a marked feature, and usually persists for several days after the reflex movements can no longer be elicited. Similar but uncrossed movements of the limb which is stimulated may also occur."

The writer, who had previously described this sign as occurring in cerebral tumor, various cerebrospinal conditions, and diphtheria, studied thirty-seven cases of typhoid fever with the following results: The complete reflex was present on one side in four cases and in nine other cases there was an incomplete response. In other words, approximately one-third of all cases showed this reflex, and it seems to be pathognomonic when occurring, as Gunson never found it in doubtful cases which turned out later on to be simple enteritis. The time of onset and duration of this sign seemed to be variable, occurring as early as the second day and lasting into the eighth week.

It seems probable that this reflex is due to a temporary disturbance of the spinal cord, possibly caused by the toxemia, somewhat analogous to the meningismus often occurring in the acute infections of children. It should be sought for in other acute infections before we place it definitely in our diagnostic equipment.—*The Medical Brief*.

OBSTETRICAL

CAESAREAN SECTION: INDICATIONS, TECHNIQUE, AND TIME OF OPERATING.

Charles M. Green (*Boston Medical and Surgical Journal*) draws his inferences and conclusions on this subject not only from the results of a previous series published in 1907, but from the work of the past eight years, covering above three hundred Cæsarean sections. In regard to the time of operating, except in rare cases such as cardiac, toxemic, and placenta previa conditions, it is generally best not to operate until the parturient has been in labor for a certain number of hours, and he states the advantages of such procedure as follows: (1) It is certain that the pregnancy has reached its full term. Abdominal Cæsarean section is done largely in the interest of the baby in elective operations, and it is a pity to deprive the baby of its last two or three weeks of intrauterine development. (2) There is greater certainty that in the convalescence the uterus will have free drainage. Labor continues naturally until the cervix is taken up and the os uteri expanded an inch or two allows for free drainage, and risks of lochial retention are avoided. (3) There is less bleeding from the placental site. (4) The uterine scar is stronger. Sutures applied to a wall thickened by several hours of uterine activity allow for a scar as strong as, if not stronger than, the remainder of the uterus. (5) It is more certain that abdominal delivery is really necessary in the interest of mother and baby, or both, in the so-called border-line cases. Humility is good for mortals, and it may as well be acknowledged that no man can say with certainty what any given woman may do in labor. Green outlines twenty cases and says that out of this number only one mother died—from embolism—and that there was no fetal loss. From his present knowledge and experience he draws definite conclusions, part of which are given here: (1) Every pregnant woman should receive the best of antepartum study and care in order that the obstetrician may understand the

conditions presented. (2) Except under special conditions, labor should be allowed to progress for a number of hours. (3) During the observation of labor vaginal examinations should be avoided, and progress noted by external and rectal palpation. (4) Except when easy access to the pelvis is necessary, the supraumbilical incision is preferable. (5) There is no reason for eventration of the undelivered uterus. (6) Time should be taken for a triple-layer suture of the abdominal wall, especial care being used with the fascia, which is best closed with overlapping and mattress stitch. (7) The uterine wall, thickened by some hours of muscular contraction, should be closed carefully with deep and seroserous absorbable sutures. (8) The uterus was created a movable organ; it should be allowed to remain so, at least in all married woman, until after the climacteric.—*Medical Record*.

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M. D. corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

THE TENNESSEE STATE MEDICAL SOCIETY.

This venerable and time honored association met in its eighty-fourth annual session in the Wilson auditorium of the Y. M. C. A. April 10th, 11th and 12th.

This was doubtless the most largely attended meeting in the history of the society. According to the statement of the secretary over four hundred delegates were registered and probably over a hundred who did not register were in regular attendance. The meeting was thoroughly enjoyable throughout, the papers presented being of the best class and widely discussed. Enthusiasm of an unusual degree marked the different sessions and every physician who attended departed for home filled with pleasant memories of scientific papers listened to and old acquaintances revived. The social features of the occasion were enjoyable, and the annual banquet at the Tulane Hotel a great success. The exhibits at this meeting of paraphernalia belonging to the physicians domain were full of interest to the visiting doctors. The patriotic spirit of the medical profession was clearly manifested at the banquet where a number of speeches professing the loyalty of the profession to the U. S. government and its readiness as expressed in a telegram sent to President Wilson to respond to any call the chief executive may make.

The officers of the association elected on the third day of the meeting were as follows: President, E. T. Newell, M.D., Chattanooga; Vice President for East Tennessee, H. M. Cass, M.D.,

Johnson City; Vice President for Middle Tennessee, T. G. Polard, M.D., Nashville; Vice President for West Tennessee, W. O. Sullivan, M.D., Newbern; Treasurer, J. F. Gallagher, M.D., Nashville; Secretary, Olin West, M.D., Nashville, reelected; delegate to the American Medical Association, A. F. Richards, M. D., Sparta; alternate, W. B. Burns, M.D., Memphis; councilors, S. R. Miller, M.D., Knoxville; Z. L. Shipley, M.D., Cookeville; W. C. Dixon, M.D., Nashville; A. B. Dancy, M.D., Jackson, and W. T. Black, M.D., Memphis. The next place of meeting for its eighty-fifth session will be held at Memphis, Tenn.

John Henry Clay Cuffman, M.D., Gurdon, Ark.; University of Nashville, Tenn., 1889; aged 53; a Fellow of the American Medical Association; local surgeon of the Missouri Pacific System; President of the Clark County Bank; died in St. Luke's Hospital, Little Rock, Ark., March 18th.

The annual meeting of Alienists and Neurologists will be held Monday, July 9th, to Thursday, July 12th, 1917 in the Red Room, LaSalle Hotel, Chicago, under the auspices of the Chicago Medical Society. Dr. George A. Zeller will act as chairman. The program will be mailed June 28th, with abstract of each paper. Contributors to the program are solicited. This is a society without a membership fee. Address, Secretary A. and N., Room 1218-30 No. Michigan Ave., Chicago. ,

KILL FLIES AND SAVE LIVES.

Kill at once every fly you can find and burn his body.

Observers say that there are many reasons to believe there will be more flies this season than for a number of years.

The killing of just one fly NOW means there will be billions and trillions less next summer.

Clean up your premises; see and insist that your neighbors do likewise.

Especially clean "out-of-the-way places," and every nook and cranny.

Flies will not go where there is nothing to eat, and their principal diet is too filthy to mention.

The fly is the tie that binds the unhealthy to the healthy!

The fly has no equal as a germ "carrier"; as many as five hundred million germs have been found in and on the body of a single fly.

It is definitely known that the fly is the "carrier" of the germs of typhoid fever; it is widely believed that it is also the "carrier" of other diseases, including possibly infantile paralysis.

The very presence of a fly is a signal and notification that a housekeeper is uncleanly and inefficient.

Do not wait until the insects begin to pester; anticipate the annoyance.

April, May and June are the best months to conduct an anti-fly campaign.

The farming and suburban districts provide ideal breeding places, and the new born flies do not remain at their birth place but migrate, using railroads and other means of transportation, to towns and cities.

Kill flies and save lives!

Edward Hatch, Jr. Chairman; John Y. Culyer, Daniel D. Jackson, Dr. Albert Vander Veer, Committee. April, 1917.

ANNOUNCEMENT.

Association of Medical Officers of the Army and Navy of the Confederate States.

The twentieth annual meeting of the Association of Medical Officers of the Army and Navy of the Confederate States will be held in the New Willard Hotel, headquarters of the United Confederate Veterans, Washington, D. C., June 4, 5, 6, 7, 8, 1917.

All those who were surgeons, assistant surgeons, or acting assistant surgeons and chaplains of the Confederate army or navy, and all those who served in the army or the navy as soldiers or

sailors—not then medical officers—but who, after the war, became regular practitioners of medicine in good standing; and all regular practitioners of medicine whose fathers or grandfathers served in the Confederate army or navy are eligible to full membership.

And all those who served as matrons or nurses in the hospitals or in the field are welcomed to honorary membership.

The objects of the association are to collect all official records and important facts, as far as may be possible, relating to the history of the medical departments of the army and navy of the Confederate States; to ascertain the military records of all the officers and prepare a roster of the same; to honor the memory of its deceased members, and the memory of the nurses; and otherwise, not already mentioned, to perpetuate the history of said departments and of this association.

Further information will be supplied upon application to the Secretary.

(Signed) Carroll Kendrick, M.D., President, Kendrick, Miss. Official: Samuel E. Lewis, M.D., Secretary, 1418 14th Street, N. W., Washington, D. C. March 15, 1917.

MEDICAL INTERNE.

St. Elizabeths Hospital, June 6, 1917.

The United States Civil Service Commission announces an open competitive examination for medical interne, for both men and women, on June 6, 1917, at the places mentioned in the list printed hereon. A vacancy in St. Elizabeths Hospital, Washington, D. C., at \$900 a year, with maintenance, and future vacancies requiring similar qualifications will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

Male eligibles are desired for the existing vacancy.

The positions are tenable for one year, and pay \$75 a month and maintenance. During the year, however, a postgraduate course in mental and neurological diagnostic methods is given, an exam-

ination is held, and promotions to the next grade, junior assistant physician, are made. Beyond this there is regular advancement for men whose services are satisfactory. St. Elizabeths Hospital has over 3,000 patients and about 800 employes to care for. In addition to the general medical practice offered, the scientific opportunities in neurology and psychiatry are unsurpassed.

Competitors will be examined in the following subjects, which will have the relative weights indicated:

<i>Subjects</i>	<i>Weights</i>
1. Anatomy and physiology (general questions on anatomy and physiology, and histology or minute anatomy---	10
2. Chemistry, materia medica, and therapeutics (elementary questions in inorganic and organic chemistry, the physiologic action and therapeutic uses and doses of drugs) -----	15
3. Surgery and surgical pathology (general surgery, surgical diagnosis, the pathology of surgical diseases)--	20
4. General pathology and practice (the symptomatology, etiology, diagnosis, pathology, and treatment of diseases) -----	25
5. Bacteriology and hygiene (bacteriologic methods, especially those relating to diagnosis; the application of hygienic methods to prophylaxis and treatment-----	15
6. Obstetrics and gynecology (the general practice of obstetrics, diseases of women, their pathology, diagnosis, symptoms, and treatment, medical and surgical_	15
Total-----	100

Applicants must show that they are graduates of a reputable medical college or that they are senior students in such an institution and expect to graduate within six months from the date of this examination. The names of senior students will not be certified for appointment in the event they attain eligibility in the examination until they have furnished proof of actual graduation.

Applicants must not have graduated previous to the year 1915 unless they have been continuously engaged in hospital, laboratory

or research work along the lines of neurology or psychiatry since graduation, which fact must be specifically shown in the application.

Applicants must be unmarried.

Age, 20 years or over on the date of the examination.

No sample questions of this examination will be furnished.

Applicants must submit to the examiner on the day of the examination their photographs, taken within two years, securely pasted in the space provided on the admission cards sent them after their applications are filed. Tintypes or proofs will not be accepted.

This examination is open to all citizens of the United States who meet the requirements.

Applicants should at once apply for Form 1312, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C., or to the secretary of the United States Civil Service Board at any place mentioned in the list printed hereon. Applications should be properly executed, excluding the medical and county officer's certificates, and filed with the Commission at Washington in time to arrange for the examination at the place selected by the applicant. The exact title of the examination as given at the head of this announcement should be stated in the application.

Issued April 2, 1917.

"He died of typhoid fever on the 14th of December, 1861."

To be the consort of a queen, to be beloved by her people, both high and low, to be the real but unobserved adviser of the affairs of an empire, these are achievements worth while. To be cut off from all of them at the prime age of 42 by a wholly preventable disease seems wanton. "The good Prince" Albert, consort of Queen Victoria, patron of the arts and sciences, a skillful administrator and an upright man was sacrificed to a filth disease.

Typhoid fever is found only in man. It is caused by a short rod-shaped microscopic vegetable, which enters the body through the mouth and leaves in it human discharges to enter another

human mouth to which it is carried by fingers, flies, fluids and food. It is essentially a disease of young adult life. Older people are less apt to have it probably because they have suffered from an attack of the disease in their youth.

Typhoid fever is known by various names, "slow fever," "low fever," but whatever name it is called by it kills about 8% of those whom it attacks. A certain percentage of those who recover become carriers, that is, persons who though well excrete the organisms of the disease in their discharges. Carriers are largely responsible for the perpetuation of typhoid fever, but the installation of proper sewer systems which not only take away noxious wastes but also do not deposit them in some one else's water supply, the abolition of flies, cockroaches, and other filth insects, the maintenance of a pure food supply, and the intelligent care of the typhoid patient, these are the measures which will rid us from this disease. Until very recently typhoid has been the scourge of armies but now the anti-typhoid inoculation has reduced this danger to a minimum.

The Prince-Consort was universally mourned. The grief of the queen was deep and lasting and the whole nation sympathized in the truest sense with her in her sorrow. How many widows of less exalted position mourn also because of the rapacity of typhoid fever?

NOTICE TO ADVERTISERS.

While we gladly give space to reading notices in our regular issues we must ask that such notices be abridged as much as possible hereafter as we have been compelled, by increased costs of publication, to reduce the size of the Journal by twelve pages.

Reviews and Book Notices

Clinical and Laboratory Technic—By H. L. McNeil, A.B., M.D., Adjunct Professor of Medicine and Instructor in Physical Diagnosis, University of Texas Medical School, Galveston, Texas. Illustrated. St. Louis. C. V. Mosby Company. 1916.

This little book was prepared especially for hospital internes and advanced students to assist them in their laboratory work and clinical tests and as such will be found a most valuable handbook. It will also prove of value to the general practitioner who does some of the laboratory tests himself. The author pays particular attention to the trial of history taking, physical diagnosis and laboratory analysis, and while he does not claim anything in the work different from that found in other books, he insists that only practical details are given and theoretical considerations, entirely omitted. It is fully illustrated and systematically arranged. We do not hesitate to say that the little book will be found of the greatest value to everyone interested in careful scientific diagnostic methods.

Practical Uranalyses—By B. G. R. Williams, M.D., Director Wabash Valley Research Laboratory. Author of *Laboratory Methods*, etc. Illustrated. St. Louis. C. V. Mosby Company. 1916.

This is another useful vade mecum issued from the press of C. V. Mosby Company of St. Louis. Examination of the urine is an essential requirement of every diagnostic examination. To our mind this little book is of the greatest value to students and practitioners who desires to become familiarized with this important aid to diagnosis. Six chapters make up the book. Chapter I, Properties of the Normal Urine. Chapter 2, General Urinalysis. Chapter III, Chemical Urinalysis. Chapter IV, Quantitative Urinalysis. Chapter V, Microscopic Urinalysis. Chapter VI, Bacteriological Urinalysis.

From this table of contents our readers can obtain an idea of the makeup of the little book. We are pleased with the manual and take pleasure in recommending it to the profession.

A Journey Around the World by an Oculist—By Flavel B. Tiffany, A.M., M.D., Kansas City, Mo. Franklin-Hudson Publishing Company, Kansas City, Mo. 1917. Price \$2.00.

We have been greatly interested in the letters from Dr. Tiffany, published regularly in the *Medical Fortnightly*, giving brief but delightfully clear descriptions of the distinguished oculists visits to the most important doctors, especially oculists in various foreign countries. These letters we are pleased to state are to be published in book form and as such will prove of great interest, not only to the general public, but also to the specialists in this branch of surgery. The book will be profusely illustrated and the text will be written in the peculiarly attractive manner of the author so that it will prove of the greatest interest to the reader. We trust doctors will avail themselves of seeing the world in this book through the eyes of an oculist.

Cataract—Senile, Traumatic and Congenital—By W. A. Fisher, M.D., Professor of Ophthalmology, Chicago Eye, Ear, Nose and Throat College, Chicago. Published by Chicago Eye, Ear, Nose and Throat College. 1917.

We are indebted to the author for a copy of this exceedingly interesting and practically instructive book. The six points the author endeavors to emphasize are:

First: A new method of acquiring operative technique upon the eye-ball with the aid of four weeks' old kittens.

Second: Discarding all kinds of eye specula and holding the lids away from the eyeball when operating or dressing the eye after injuries.

Third: Dressing and treatment after cataract operations.

Fourth: A modification of the Smith-Indian operation for cataract, making the removal of the lens in capsule safe and necessarily the operation of choice.

Fifth: A method of treating injuries of the lens other than watchful waiting.

Sixth: A systematic procedure for determining the treatment of congenital cataract.

The features of this book as shown by these points indicates the advanced methods of treatment advocated and the improved technique demonstrated in the operative treatment of this distressing condition. We feel sure that the little book will be well received by the profession and that it will prove of inestimable value to all interested in this branch of surgery. The book is illustrated copiously by clear and readily interpreted illustrations.

Publisher's Department

THE WIDER USE OF THE BROMIDES.

The great utility of the bromides when intelligently used, is not half appreciated by the average practitioner. To be sure, medical men do not employ the bromides for many conditions, but to nowhere near the extent that they could. It is a mistaken idea that bromides are serviceable only for the treatment of nervous diseases. It is true, their effects may be accomplished primarily by their action on the nervous system, but when we stop to think of the essential part played by nervous factors in the maintenance of vaso-motor equilibrium, secretory activity, nutrition and so on, the service that the bromides can be called on to render in a wide variety of abnormal conditions can readily be seen.

Obviously, too great care can not be exercised in selecting the bromide salts to be used, particularly in respect to their purity and quality. Probably one of the main reasons why the bromides have not been more generally employed is the indifferent quality and impurities which have characterized so large a portion of the available bromide preparations.

Those who have used Peacock's Bromides, however, have been able to employ the full advantages of this class of drugs. Made from the purest and highest grade of salts, and combined with every care and skill, Peacock's Bromides have assured the highest therapeutic efficiency with gratifying freedom from all objectionable or unpleasant effect. As a consequence, the range of use of this reliable bromide preparation has been surprising, even to those most familiar with the possibilities of bromide treatment. Many affections characterized by congestion, or having their origin in nervous irritation and the resulting spasmodic conditions, have responded to Peacock's Bromides when other measures have proven useless. So with spasmodic disorders of the intestines; many conditions that have seemed organic in character and

doomed to operation, have been properly corrected by liberal doses of Peacock's Bromides.

Many other instances showing the utility of this remedy could be cited, but lack of space forbids. Suffice it to say that there is hardly any remedy at the physician's command with a broader field of usefulness. To be able to use Peacock's Bromides in adequate dosage and for requisite periods of time, with complete absence of deleterious effect has undoubtedly been more or less responsible for the foregoing, but the fundamental fact is that the bromides in the form of Peacock's Bromides have a much more extensive field of successful application than is realized.

RATIONAL TREATMENT OF BOWEL INERTIA.

There is probably no one class of drugs that has been subject to such great abuse as the laxatives. So routinely and promiscuously have remedies to increase bowel activity been prescribed that the American people have been dubbed a "nation of physic devotees."

It is indeed unfortunate that cathartics and laxatives have been thus employed with so little "rhyme or reason." The harm that has been done is only too apparent in the countless sufferers who never have a natural bowel evacuation.

Happily a good many physicians are awakening to the desirability of directing their treatment of bowel inertia and torpidity toward rational stimulation of the physiologic functions of the intestinal tract. The results obtained point so conclusively to the wisdom of this line of treatment that the older measures which depend for their effects on irritation of the intestinal mucosa or nervous mechanism of the bowel, or both, are rapidly becoming obsolete.

Among the remedies that act by correcting insufficiency of the physiologic processes of the bowels, Prunoids undoubtedly enjoy greatest popularity. The action of this true activator of intestinal functions is prompt and decided, but what is especially noteworthy, this action of this true activator of intestinal functions

is prompt and decided, but what is especially noteworthy, this action is without griping or any other disagreeable effects. Reactionary constipation does not follow, and unlike so many other laxative measures, Prunoids do not require continuous use in constantly increasing dosage. In fact, owing to the effect of Prunoids on the fecal mass, whereby shrinkage in size and loss of moisture are prevented, the physical conditions which promote and favor intestinal peristalsis are promptly restored. As a consequence, the functional activity of the bowels produced by Prunoids shows remarkable persistence, and a dose on two or three consecutive nights is often followed by evacuations of a most satisfying character for several days.

It is this tendency of Prunoids—not only to produce one or more movements following each dose, but to promote physiologic regularity of the bowels—that makes this remedy so much superior to “salts,” or the laxative measures commonly employed. In simple words, the use of Prunoids means the rational treatment of bowel inertia—the activation of physiologic functions.

IN CHILDREN AND IN OLD PEOPLE.

Kidneys are often affected by exposure to cold or chill. These disturbances may range from sudden and frequent desire to urinate to the severe forms of urinary irritation. The first is usually accompanied with free and excessive flow of water, where in the latter case there will be but a small quantity of water, frequently passed with difficulty and pain. If the cause is not removed, this dysuria with frequency may continue day and night until cystitis occurs, or until a spastic renal condition is found to be present, with active congestion followed quickly by acute inflammation. The remedy is heat persistently applied externally to produce relaxation and sanmetto in drachm doses for adults every hour until relief, then less often as indicated, and half doses for child in like manner. Particularly is it true with men suffering from prostatic trouble that they are often affected by exposure to cold or chill, causing congestion at the bladder neck, with frequent desire to

urinate, and urine passed with difficulty and pain. Hot applications externally, either moist or dry, and sanmetto in teaspoonful doses every hour until relief, is the remedy.

ECTHOL AND INFECTIONS.

It has been shown that Ecthol (Battle) has a distinctive value in infection, and with many physicians its employment in both local and systemic infections is a routine practice. While this clinical fact is easily determined, the actual *modus operandi* of this agent within the tissues is not so easily understood, but it seems logical to assume that it increases the phagocytic power of the blood stream, thereby enabling the system to overcome the assault of the infectious organism. In systemic infections Ecthol (Battle) is administered internally throughout the patient's waking period, and in local infections with suppurative manifestations direct applications of it are made.

IN FUNCTIONAL NERVOUS DISEASES.

The first and fundamental question which the earnest physician asks today in determining the utility of any remedy he wishes to use is "what will it accomplish?" If it does what he asks it to do, and does it better than anything else he has ever employed, he will certainly use it in preference to anything else. If it fails and proves valueless, he will as certainly discard it in short order. His common sense and intelligence will permit of no other course, for medical men build their practices on successes, not on failures. Beneficial results of a definite, positive character are constantly sought and it is in achieving these that a physician proves his worth as a practitioner of medicine. Thus in the treatment of functional nervous diseases derangement of the bodily nutrition is so prominent a factor that the first consideration in these affections is a restoration of the nutritional balance. To accomplish this, Gray's Glycerine Tonic Comp. is widely recognized as a remedy of remarkable efficiency. Under its systematic use the ap-

petite is increased, the digestion is improved and the nutrition shows a marked and substantial gain. Coincident with this nutritional gain there is a corresponding increase in nerve force with a very pronounced and gratifying correction of insomnia, indigestion, headaches, vague pains, nervousness and other symptoms of nervous origin.

If you have some case of neurasthenia or other functional nervous disease and would like to give Gray's Glycerine Tonic a critical trial why not send today for samples? A supply will be sent you at once. Address the Purdue Frederick Co., 135 Christopher St., New York.

"I am pleased to inform you that I have had wonderful success with Tongaline during our epidemic of grippe here in Boston."

"I have used Tongaline for more than twenty years and have found it most satisfactory in every way. A very recent case which came under my care was one in which several physicians had failed, even with the use of organo-therapy. Within forty-eight hours after Tongaline had been administered there was a decided remission of temperature and pain, and at the end of one month the patient, who was a lady about seventy years of age, and had been a sufferer for years, was able to go about her room and to comb her own hair, something which she had not done for six months previously."

CHRONIC CONSTIPATION OF WOMEN.

In the treatment of this condition, what the physician may expect INTEROL to do is the following:

(1) It keeps the feces from becoming dried and hard. That is, it keeps them *soft* and *plastic*; (2) and in addition, by *lubricating* them, it (3) enables them to squeeze or slip through angulations, convulsions and constrictions of a crowded gut; (4) at the same time, there is a *protective* action to any raw or abraded spots.

By doing these things, INTEROL relieves fecal pressure and gaseous distention, so that the autotoxic as well as nervous symptoms are likely to be reached.

All these it does effectively and harmlessly. Its use does not prevent the adjunctory use of any orthopædic, surgical or other procedure that may be indicated. On the contrary, INTEROL itself is more an adjunct to such other measures.

INTEROL is unquestionably all that it is claimed to be—a valuable “dietetic accessory.” There is no other accessory measure that will better accomplish what INTEROL does accomplish in cases where it *can* accomplish it.

DOSAGE is usually a tablespoonful morning and night on an empty stomach, although this varies with the individual peculiarities.*

*Booklet and samples to physicians. Van Horn & Sawtell, 15-17 E. 40th St., New York.

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Original Communications

APPENDICITIS COMPLICATING PREGNANCY.

BY AIME PAUL HEINECK, M.D.,

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(Concluded from last month.)

PROGNOSIS.

Pregnancy increases the severity and the fatality of appendicitis. Death may be due to intestinal obstruction, to perforation of the appendix, to heart failure, to peritonitis, or to sepsis. Recovery takes place through the gradual subsidence of symptoms; through the spontaneous rupture of an appendicular abscess externally, or into the gut, vagina, urinary bladder, uterus, or other hollow viscus.

The type and the acuity of the inflammation influence the prognosis. The prognosis is good if the changes in the appendix are slight, if the inflammation is limited to the appendiceal wall; if there be slight or no peritoneal involvement, if complications be absent. It is grave in gangrenous, perforative and suppurative appendicitis and in all cases complicated by abscess formation,

near or distal, or by diffuse peritonitis. The results for the mother and fetus are better the less advanced the gestation, the less virulent and widespread the inflammation, the earlier the operation. Maternal mortality of appendicitis in pregnancy increases from the fourth month on.

As far as the child is concerned, prognosis is absolutely good in cases of early operated appendicitis. Severe maternal appendicitis is exceptionally grave for the fetus, who succumbs either through infection or through interruption of pregnancy. In our cases, there were fifty-eight abortions; of these, nine were induced and forty-nine were spontaneous. The spontaneous abortions gave seventeen maternal deaths and thirty-two recoveries. The induced abortion gave four maternal deaths and five recoveries.

PROPHYLAXIS.

The cause of appendicitis is not known. Therefore, in the present state of our knowledge a discussion of the prophylaxis of appendicitis, of necessity, must be and is incomplete, inadequate and inconclusive. The importance of constipation as an etiological factor in appendicitis is as yet undetermined. We do not know how to prevent appendicitis, but we do know how to lessen its morbidity and mortality. Some surgeons remove the appendix during the course of all laparotomies. The removal of a healthy organ because one is not certain that it will always remain free of disease is unnecessary, meddlesome, and contrary to the teachings of conservative surgery.

In all laparotomies for conditions other than appendicitis, if the patient's condition permits, the appendix should be examined and removed, 1. If it be abnormal in length, size or location. 2. If it be in close relation to a pedicle or denuded surface, left by operation. 3. If its cavity be partly or wholly obliterated. 4. If it be the seat of anatomic alterations, club-shaped, thickened, kinked, twisted, strictured, etc. 5. If it contains foreign bodies, fecal concretions, worms, etc. If it be adherent, in part or in its entirety, to some normal or diseased contiguous organ or to the abdominal parietes. 7. If it be the sole content or one of the con-

tents of a hernial sac. 8. If it be the seat of cystic, neoplastic or inflammatory disease.

Operations that contribute to the safety of a pregnant woman should be performed without hesitation.

INDICATIONS FOR OPERATION.

Clinical cures obtained by medicinal measures are rarely anatomical cures. Starvation treatment is debilitating to the mother, is unfavorable to fetal growth. Perforation, abscess, general peritonitis, subdiaphragmatic abscess, thrombosis and embolism are possible results of expectant treatment. Better to remove too many appendices than too few. Be not deterred by the possibility of a difficult operation for the results of early operation are satisfactory and the mortality low.

Operate early in the attack and early in the course of pregnancy. As a general proposition, operation does not interrupt pregnancy. The triumphs of ovariectomy and hysterectomy in pregnancy are well known; in appendicitis operation is even more urgent. Accumulated instances are on record in which pregnant uteri have been operated upon, cauterized, etc., in which ovarian and other pelvic tumors have been removed without pregnancy being terminated. The high mortality of appendicitis in pregnant women is due to fatal temporization. Placental, uterine and peritoneal infections are such serious complications that one should, if possible, operate before the inflammatory process has extended beyond the appendical wall, before abscess formation has taken place, before the onset of peritoneal or other complications.

Operate early in gestation. At that period the uterus is not large enough to be in the way. The operation is less difficult; the tendency to the interruption of pregnancy is minimal and the percentage of maternal recoveries is higher. The danger of recurrence in the latter months of gestation calls for operation during the attack; if that be not feasible an interval operation should be performed as long before the labor as possible.

Operation in fifty cases of non-perforative appendicitis gave only one maternal death and seven abortions. In fifty-five cases of diffuse peritonitis secondary to appendicitis, there were forty-

four maternal deaths, only one child was saved, all the others were born prematurely or died soon after birth from weakness, or the illness of the mother resulted fatally before the termination of labor.

TREATMENT.

Interruption of pregnancy is not indicated; it increases the danger. Rest should be enjoined; during the operation, the uterus should be handled and exposed as little as possible; after the operation, opiates should be administered. In a clean case, the operative manipulation is slight. Artificial evacuation of the uterus before laparotomy is indicated only when the child is dead or when there are appreciable signs of labor. If the uterus be artificially emptied before the seventh month, the child will be definitely lost and the patient not improved. By evacuating an appendiceal abscess before emptying the uterus one avoids flooding the free peritoneal cavity with pus. Operations for appendicitis are performed under local or general anesthesia. Some operators resort to lumbar anesthesia. Operate as rapidly as is consistent with thoroughness and the patient's welfare.

The operation of election is appendectomy, the technique of which is little influenced by the presence of pregnancy. The same surgical principles are applicable in the pregnant as in the non-pregnant.

When in doubt as to whether the case is one of appendicitis, salpingitis, tubal pregnancy or other pathological conditions, use a supra-pubic median incision. This incision affords easy access to most of the pelvic contents, and though it is not the incision of election for exposure of the appendix, it is a very serviceable incision. In cases of combined appendicitis and salpingitis, combined appendicitis and tubal pregnancy, combined uterine myoma and appendicitis, etc., the median infraumbilical incision should be employed.

In 125 of our cases the appendix was removed. In forty-three cases, it is not stated whether it was removed or not. In five cases, it was sought but not found, and therefore, not removed. Each of these cases presented an abscess, which was evacuated and drained. If the appendix be imbedded in a mass of firm in-

flammatory adhesions, it can be removed by shelling it out of its peritoneal coat.

An appendical abscess should be opened at its point of maximal bulging; preferably through a cutaneous surface. If the appendix be not easily found, be content with incising the abscess, evacuating its contents and resorting to tube or gauze drainage. A subsequent operation will rarely be required to remove the appendix. Appendiceal abscesses have been opened and drained through the vagina. Appendical abscesses have also been opened through the rectum. These are exceptional procedures: methods of necessity not of election.

The post-operative treatment is that which is employed in the non-gravid modified only by a longer sojourn in bed, thereby giving time for firm consolidation of the operative wound.

POST-OPERATIVE COMPLICATIONS AND SEQUELÆ.

In cases of such widely different nature as those herein studied, operated in different surrounding and by different operators, one is not surprised to find noted the occurrence of post-operative complications and post-operative sequelæ. The danger of hernia development after timely operations for appendicitis is practically nil. The protection of the operative scar by the aid of adhesive plaster has been recommended. See that labor be not unduly prolonged.

Among the sequelæ reported in these cases were four ventral hernias, three cases of diffuse peritonitis, thrombosis of femoral veins, phlebitis, subphrenic abscess, intestinal fistulæ, etc.

SUMMARY.

1. Appendicitis occurs at all ages and in both sexes. It presents to all medical men important diagnostic, prognostic and therapeutic features.

2. Appendicitis, acute or chronic, initial, relapsing or recurrent, primary or secondary, complicates pregnancy with greater

It is not necessary to split the epididymis, but only the infected tion of pregnancy.

3. It occurs in single and twin gestations; in first, early and late pregnancies; in primiparæ, deutiparæ, and multiparæ.

4. It occurs at all periods of the child-bearing age and at all periods of gestation. It complicates both intra- and extra-uterine pregnancies and can co-exist with other disease processes to which it may be primary, secondary or co-incidental.

5. Gestation exerts no untoward influence upon the normal appendix. It can and frequently does aggravate existing, or determine new inflammatory disturbances in appendices deviating from the normal in form, length, mobility, location, etc., in appendices bound down by adhesions or the seat of inflammatory or other degenerative changes. Pregnancy does not relieve the dangers of appendicitis, but aggravate them.

6. Appendicitis and uni or bilateral tubal pregnancy are frequently mistaken for each other. They may occur simultaneously or consecutively, may be either primary or secondary to, or independent of each other.

7. In appendicitis, in ectopic pregnancy and in combined appendicitis and ectopic pregnancy, of obscure symptomatology, it matters not whether you are certain or in doubt as to the real diagnosis, early and timely operative treatment is imperatively indicated.

8. During gestation, every type of appendicitis may occur: adhesive, catarrhal, gangrenous, ulcerative, obliterative, perforative and suppurative.

9. Appendicitis with adhesion formation is of great significance because adhesions of inflammatory origin can (a) incarcerate the pregnant uterus in the pelvis and mechanically hinder the enlargement of the uterus, (b) impair the contractibility of the uterus, (c) interfere with uterine labor contractions, (d) entail subinvolution, (e) induce sterility, (f) disturb tubal and ovarian integrity of function and of structure, (g) determine ileus, (h) produce abortion and, (i) lead to extra-uterine pregnancy.

10. Chief among the co-existing pathological conditions noted in appendicitis are simultaneous or consecutive inflammation of the uterus, tubes or other pelvic organs. The close anatomical

relations existing between the appendix and the pelvic organs explain their frequent association in disease processes.

11. Appendicitis has a greater morbidity and a higher mortality in the pregnant than in the non-pregnant, operated or non-operated. It may terminate pregnancy.

12. The symptomatology of appendicitis in the pregnant is the same as in the non-pregnant. The clinical picture, however, is blurred by the co-existing symptoms of pregnancy. Diagnostic mistakes may be lessened by keeping in mind that appendicitis occurs in pregnant women; that a history of previous attacks during the same or previous pregnancies can frequently be elicited by thorough and deliberate physical examination. With care, one can in these cases almost always arrive at a correct diagnosis.

13. To establish with certainty the diagnosis of appendicitis during pregnancy, it is necessary to exclude the presence of myalgia due to stretching of abdominal muscles, typhoid fever, ruptured or non-ruptured tubal pregnancy, cholecystitis, salpingitis, ovaritis, adnexitis, ovarian cyst with or without a twisted pedicle, rightsided pyelitis and ureteritis, fecal impaction, hepatic and nephritic colic. At times, any of the forementioned conditions so closely resemble appendicitis as to cause diagnostic errors and operative mistakes.

14. The morbidity and mortality of appendicitis complicating pregnancy and the puerperium are the morbidity and mortality of delay in applying efficient surgical treatment. The initial symptoms of the attack do not enable the clinician to foretell accurately how a given case will terminate. What is going to happen in ten, twenty or forty hours following the onset of appendicitis can not be foreseen. When the condition is diagnosed and remedied early, the mortality is practically nil. Abscess formation may be forestalled by early diagnosis and early operation. The high mortality is due to late diagnosis and late operation. The pregnant woman whose metabolism is good is a good subject for operative measures.

15. Prognosis is better for the mother if there be no interruption of pregnancy spontaneous and otherwise. The bad attacks cause abortions and abortion aggravates the illness. In the great

majority of surgically treated cases there is no interruption of pregnancy and when it does occur it is not due directly to the operation. The interruption of pregnancy is not indicated. It aggravates the prognosis. The fetal prognosis is good in early operated cases.

16. The following prophylactic measures are sound and safe and are recommended for general adoption: (a) During the child-bearing age, recurrent attacks of pelvic pain, dysmenorrhea, menstrual and other pelvic disturbances unassociated with objective pelvis findings are not infrequently due to unrecognized appendicitis or sequelæ thereof. In the presence of this etiological factor, the ablation of the appendix is indicated. (b) In laparotomies for conditions other than appendicitis, the appendix should be examined. Should it present any deviation from the normal, its removal is indicated. (c) During the child-bearing age, any woman who has had one or more attacks of appendicitis treated non-operatively should have her appendix removed so as to correct existing pathological conditions and prevent future attacks of appendicitis and complications incident thereto. True prophylaxis in a woman of child-bearing age who has had one or more well marked attacks of appendicitis is an interval operation. It goes without saying that constipation is to be avoided and that other hygienic precautions are to be observed.

17. A definite and accurate diagnosis of acute, chronic or recurrent appendicitis, irrespective of the stage of pregnancy, invariably calls for operation. The disease during pregnancy runs such a rapid destructive course that delay is hazardous. Operation should be early and immediate. A case may be rendered hopeless by hesitation and inaction. Temporizing methods are extremely dangerous.

18. Treat appendicitis in the pregnant female as you treat it in the non-pregnant. Every pregnant woman who is a subject of appendicitis should be operated on just as soon as the diagnosis is made, whether the attack is the first, second or third.

The unusual risks of leaving a diseased appendix in the abdominal cavity are much increased by the pregnant state and the evil consequences of another attack, i. e., gangrene or perfora-

tion will be correspondingly greater. The danger of recurrence in the later months of pregnancy and in the child-bed period calls for operation preferably during the attack. If the patient is not seen in time, one will do the next best thing, an interval operation during the pregnancy. Pregnancy is an additional indication for operation in cases of appendicitis.

19. In inflammatory disease of the appendix, the ideal operation is an appendectomy. In some cases, however, one has to be content with incision, evacuation and drainage of an appendiceal abscess. Exceptionally drainage of abscesses in Douglas' pouch may be effected through the vagina or rectum. Pus should be evacuated irrespective of uterine contents, and irrespective of its location.

20. It is well to keep in mind that for an appendectomy the median incision is contraindicated in the later months of pregnancy, that it is best to avoid or to reduce to a minimum the manipulations of the uterus; opiates are indicated in the after treatment. Labor when it occurs shortly after a laparotomy is not to be unduly prolonged: it may have to be assisted.

Selected Articles

ANEURISMAL OBSTRUCTION OF VENA CAVA SUPERIOR WITH SPECIAL REFERENCE TO THE CAVAL SYNDROME.

BY P. G. SKILLERN, JR.

Skillern reports in the International Clinics an example of this condition and also gives a brief review of the literature. The caval syndrome is described as follows:

This consists of enormous œdematous swelling of the head, neck, trunk, upper extremities, and marked obstruction of the veins. These clinical manifestations depend upon the formation of a collateral circulation, the extent of narrowing of the vena, and the size and extent of the pathologic process which causes the compression.

The first result of compression is obstruction of the venous blood in the entire territory of the vena cava superior. Through dilation of all veins and capillaries in the territory of the upper half of the body an enormous cyanosis is often caused. The result of the obstructed outflow of venous blood while more blood is continually being brought to the part is the appearance of œdema. From the distribution of the œdema and its further advance one may draw diagnostic conclusions as to the site of compression. The lower half of the body is almost always free from œdema, but the latter appears here as well when, through over distension of the inferior vena cava obstruction in the tributaries of this vein results, or when through cardiac weakness œdema appears in the lower extremities and scrotum. Usually, however, even in this case the swelling of the upper half of the body remains in characteristic contrast to the very much slighter œdema of the lower. Not only the sub-cutaneous cellular tissue, but also the deeper parts are involved by the œdema, especially the medi-

astinum. Of importance also is œdematous infiltration of the mucous membranes, for thus oedema of the glottis may give ground for suddenly appearing death.

In the "diagnosis" of compression of the superior vena cava but little difficulty is encountered. The diagnosis is based upon the direction of a collateral circulation and the prominence and characteristic appearance of a dull, pulsating area and the Oliver-Cardarelli symptom.

Extracts from Home and Foreign Journals

SURGICAL

PROSTATITIS AND VESICULITIS.

It is noted by Goeltz (N. W. Med.) that in the milder forms of the focal infection group massage and irrigations will often give surprising relief and, if persisted in long enough, will give relief in all cases. In the severe forms with arthritis our task is harder. In these cases we find a more or less marked vesiculitis. Where no actual occlusion of the ejaculatory ducts of the vas in cases of epididymitis has taken place, we get good results from stripping the vesicles. The improvement is slow and the treatment must be continued over a long period. If no results are obtained by massage, vaccines, rest and hot air treatments, operation for drainage or removal of the vesicles or epididymis offer relief.—*The Medical Brief*.

SURGICAL TREATMENT OF ACUTE EPIDIDYMITIS.

McKenna (Surgery, Gynecology and Obstetrics, December, 1916) concludes an article with this title as follows:

Surgical interference is necessary only when the patient is suffering excruciating pain. When this puncture is carried out, it is quite necessary to divide the fasciæ so as to free the tension from the testicle as well as from the epididymis. Patients are less apt to be impotent if the posterior wall is divided carefully and the pus drained off than if the pus is left for nature to absorb. A blind-stab operation is that of a faker and should not be considered. It is not enough to expose the epididymis and drain it; all the fasciæ should be free.

It is not necessary to split the epididymitis, but only the infected chamber which stands out clearly—*The Therapeutic Gazette*.

ETIOLOGY OF TUMORS.

The pioneer work of Smith on the genesis of rapidly growing plant tumors has been duplicated in Germany. Slices of carrot inoculated with the *bacillus tumefaciens* have shown under the same experimental conditions great differences in rapidity of growth and malignancy. Such differences depend on the disposition of the cells of the part inoculated. The morphology agrees with that of animal and human tumors. The *B. tumefaciens* causes a growth which resembles sarcoma or fibrosarcoma in man. It can not be detected in the tumor tissue but appears in smears. A tumor was generated in a geranium, and attained such dimensions that the vitality of the plant should have been compromised, but the latter continued to grow as usual. A piece of this tumor was inoculated successfully into a slice of carrot. It further appears that *B. tumefaciens* is only one of a series of microorganisms which can cause growths to proliferate in vegetable tissues. One bears a close resemblance to *B. subtilis*. They were recovered as impurities in the cultures of *B. tumefaciens*. A diplococcus, as yet unnamed, was seen at first to possess but slight tumor-generating power but as successive generations were produced this power increased until it transcended that of *B. tumefaciens*. The *B. subtilis* (hay bacillus) is not of marked virulence.

This entire subject was discussed fully at a session last November of the Berlin Medical Society (*Berliner klinische Wochenschrift*, December 25). The opinion obtained that bacteria act merely as irritants in the production of tumors. Various mites can cause the formation of papillary and cystic tumors in plants. The evidence is at present that molluscum contagiosum is due to the activity of the *Streptococcus parvus*; while a form of epithelioma in fowls is apparently caused by a mite, the *Sarcoptes mutans*.

Saul, the chief speaker at the meeting, in closing the discussion, summed up the irritants of all types which can cause rapid tumor growth. Not only can chemical irritants like aniline and arsenic cause cancer, but also photochemical irritants like the X-rays and radium. Mites and certain worms, as animal irritants, probably

produce their effects through the irritation of their metabolic products. Bacteria also act as mere irritants.—*Medical Record*.

MAGNESIUM SULPHATE IN TETANUS.

Cammaert injected intravenously 50 c.c. of a 10 per cent solution twice a day in a case of tetanus in a young man. The symptoms of tetanus had developed about five days after a rusty nail had pierced one of his toes. There were no further general spasms after the first injection of the magnesium sulphate, and all the symptoms gradually subsided to complete recovery by the end of the second week. The drug was so strikingly effectual in this case that Cammaert suggests that it might prove useful in eclampsia, in uremic convulsions, and for children with convulsions from whooping cough or other cause.—*The Journal of the American Medical Association*.

LOCAL ANESTHESIA IN ABDOMINAL SURGERY.

L. W. Grove, of Tuscaloosa, Alabama, in the October, 1916, issue of the *Southern Medical Journal*, writes on "Local Anesthesia in Abdominal Surgery."

Stimulated by the ideas of Crile presented in his discussions of anoci-association anesthesia, we have been able, by the use of liberal amounts of 1 to 400 novocain in connection with morphin and scopolamin in amounts sufficient to induce an amnesia, to produce a practically shockless anesthesia. We have successfully operated eighteen cases, including acute and chronic appendicitis, gastroenostomy, cholecystectomy, ileosigmoidostomy, and two exploratory laparotomies. The technique has been easily carried out without discomfort to the patient or the operator, and in but one case of closure of upper abdomen was trouble experienced. In this a light general anesthesia was demanded.

Notwithstanding the majority of cases have been among the insane, they have not shown elements of dementia—upon the

other hand, the majority have been of the exaggerated or neurasthenical type, and we feel that the technique would be even more applicable in the sane, who would lend a more perfect co-operation.

Our technique in brief is as follows: Patient is given eliminative treatment in bed for two days previous, but with liquid diet continued. One hour before operation morphin $\frac{1}{4}$ Gr., and scopolamin 1-100 Gr., has been given—one-half hour later $\frac{1}{2}$ the former dose. We have routinely made use of one of the right rectus incisions following the infiltration method and perineural injection, and have been able to get free exposure without traction on wound edges, mesentery or omentum. We have repeatedly shown that pain caused from the handling of the viscera is due to traction and not to trauma, provided the tissues are properly infiltrated. The post-operative discomfort is practically nil. With the exception of stomach cases light diet has been resumed immediately following operation. There has been little or no nausea, they have needed no sedatives, and tympanites has been the minimum, with voluntary movements from the bowels in several cases. We have noted little or no mental depression following.

Even with a profound appreciation of the limitations of local anesthesia in abdominal surgery, I am sure, with a more accurate knowledge of the technique and its indications, and a clearer conception of the various contra-indications for general anesthesia, that local anesthesia must demand more and more the attention of the thoughtful man in surgery.—*Medical Review of Reviews.*

MEDICAL

A CLINICAL CONSIDERATION OF MIGRAINE.

Migraine is considered by the author as the most frequent headache, occurring in 700 of his 15,000 patients sick from all causes. He believes that the so-called acidosis in children may

be a forerunner of a well established sick headache habit. The interesting relation between migraine and epilepsy deserve further study. Among the author's 15,000 patients, epilepsy occurred in 7, and both migraine and epilepsy in 70. Auerbach's theory, which attributes migraine to an actual disproportion between skull-cavity and volume of brain, needs further proof. In the *International Clinics* for December, Dr. Litchy shows that the diagnosis is easy when there are headaches which are unilateral, periodical and hereditary, but when only one or two of these symptoms are present, or when there is only a periodicity of some of the minor symptoms or possibly of the auras, the diagnosis may be difficult. Migraine is frequently mistaken for pelvic disease, when some of the auras are present. The psychasthenic and the gastric symptoms frequently lead to confusion in diagnosis. While the underlying causes of migraine are vague and furnish little light as to treatment, much can be done to ameliorate the symptoms by proper handling of the exciting causes that aggravate the patient's general condition and precipitate the attacks. Most thorough investigation and careful individualization are indicated. Systematic administration of the bromide salts and avoidance of undue fatigue are especially recommended.—*International Clinics*.

BIRTH RATE OF WHITE AND COLORED RACES.

The relation between the birth rate and the constitution of the population in respect of race and nativity is of great interest. For the six cities in the registration area in which the colored population at the last census either numbered more than 10,000 or represented more than 10 per cent of the total, separate figures are given for the white and colored races; and in all but one of these cities—Washington, D. C.—the birth rates shown for the colored population were lower than those for the whites. It is probable however, that the registration of births is less nearly complete among colored than among white persons, and that therefore the rates shown for the former class are too low. The death rates for the colored population are higher, and in many

cases much higher than those for the whites.—*Journal-Record of Medicine*.

BLOOD PRESSURE IN THE AGED.

L. M. Bowes of Chicago, in the January *Journal of Laboratory and Clinical Medicine*, reports that in making a study of the blood that repeated observations of both sides of the body were of great pressure of 150 cases between the ages of 65 and 95, it was found of value in diagnoses, prognoses and treatment.

On account of the great hardness of the blood vessels of some, it was very difficult to get true and accurate readings. A few were liable to have a hemorrhage occur in the anterior surface of the wrist because of the brittleness of the small blood vessels. This accident happened in one case, but without any bad effects.

A number of the more feeble tired easily, making it necessary to make all observations as quickly as possible, releasing the air from the armlet between each reading and not maintaining the pressure too long at any time.

The average systolic and pulse pressures increased to the age of 85 and then decreased. The average diastolic pressures remained in the eighties except for the period from 85 to 89, when it was 90 mm. of Hg.

The blood pressures were higher in women, except after the age of 90.

Seventy-five per cent showed an inequality of the blood pressure on the two sides of the body. This condition is frequent in arteriosclerosis.

There was a persistent high blood pressure in only 25 to 30 per cent of the cases of marked arteriosclerosis. When the process of fibroses involved the heart resulting in myocarditis, the pressure fell.

There were constant high systolic and diastolic pressure in all cases of chronic nephritis.

Most cases of cerebral hemorrhage had a high or increased blood pressure. High blood pressure diagnosticated cerebral hemorrhage from cerebral embolism.

A high pulse pressure was common in arteriosclerosis and aortic regurgitation. This was caused, in the latter conditions, by a sustained high systolic with a low diastolic pressure, while in arteriosclerosis the systolic was increased in greater proportion than the diastolic pressure. A lowering blood pressure always indicated a failing heart.

The study of the blood pressure greatly aided the author in rendering more intelligent care to these elderly people.—*Medical Review of Reviews*.

ARTERIOSCLEROSIS.

Certainly a large proportion of the vascular lesions one sees, especially those in the aorta, is of infectious origin, judging from the microscopic appearances. That is to say, they are typically inflammatory lesions which originate in the media about the vasa vasorum. There is, however, a large number of cases in which these inflammatory lesions are absent, but in which there are evidences of degenerative changes which are represented by fatty plaques and streaks showing through the intima, and others in which the lesions are merely productive ones affecting the intima itself. Practically all investigators who have endeavored to produce vascular lesions, experimentally, with bacteria, have succeeded in causing inflammatory lesions associated with, in many cases, degenerative changes. Those who have used adrenalin have produced only degenerative lesions.

Bailey¹ has experimented with a toxin—that of the diphtheria bacillus—which he has used in sublethal doses over different periods of time, and studied the effects upon the vascular system and the kidneys of rabbits. In order to discover the relation of high blood pressure, he has used pituitrin in combination with the toxin in one series. Pituitrin was used because it produces no vascular lesions. He has been able to produce, with large doses of toxin, a vascular degeneration involving the entire aorta, the carotids to the base of the skull, the subclavians and iliacs, and, for a varying distance distally, the brachials, femorals, and

large abdominal vessels. In combination with pituitrin extensive calcification occurred, due, Bailey believes, to the production of more extreme fatty degeneration. In the kidneys the toxin produced a pronounced vascular and parenchymatous degeneration.

Bailey remarks that the experiments do not shown the effects of frequently repeated small doses, and it strikes one that this is what should be shown if the application is to be valuable. An individual does not, during disease, get a large dose of toxin at 10 a.m., and then none for another day or more. He is poisoned by more or less *continuous* absorption of toxic materials which are produced in gradually increasing amounts and then in gradually decreasing amounts. In diphtheria, the course of the disease is short and the period of absorption is brief; in typhoid, the course is longer; in intestinal stasis, it may be very protracted—but in all it is continuous.

The thing that Bailey's work is useful to demonstrate is that a certain type (degenerative) of arteriosclerosis is not microbic—not infectious—in origin, but toxic, and that the lesions may be produced by concentrated materials.—*The Journal of the American Medical Association*.

EVIDENCE ADMITTED THAT POLYDACTYLISM IS USUALLY HEREDITARY.

In a statutory rape case testimony of a physician that supernumerary fingers are usually hereditary was held admissible. Polydactylism is usually considered by law writers under the general head of malformations, and is regarded by well-recognized authorities as being hereditary and frequently caused by consanguineous marriages. Under the authority of Dr. Thomson, surgeon in the general prison of Scotland, it is stated in Wharton & Stille's "Medical Jurisprudence," volume 1, section 367, that epilepsy, dipsomania, spinal deformities, stammering, imperfect organs of speech, clubfeet, cleft palates, harelip, deafness, paralysis, and similar marks of physical degeneration accompany

the hereditary lines of abnormal conditions of the human family.
—People v. Kingcannon, Illinois Supreme Court, 114 N. E., 508.

CHARCOT'S JOINT.

James Y. Welborn, of Evansville, Indiana, in the *Lancet-Clinic* for September 30, 1916, writes on "Charcot's Joint." The author says that this lesion in ninety or ninety-five per cent of cases occurs in tabes; the remaining five to ten per cent appears in syringomyelia. Elbow and knee are most frequently affected; the joint is usually large, loose and filled with fluid, with increased play of the bones. There is often considerable deformity and some limbs seem to be extended. Trophic changes due to the underlying disease may affect any of the tissues, resulting in necrosis, dislocation of the bones, spontaneous fractures and dislocation, etc. Infection of the joint may occur.

In making a diagnosis, it is necessary to exclude inflammatory and tuberculous joints. The recognition of the symptoms of the underlying disease is the most important part of the diagnosis.

Two interesting cases are reported. The first was a man 27 years of age whose left arm was enormously enlarged from the elbow to the fingers which were stubs, resulting from necrosis following frost bite six years before. This fact is of interest—the thermo anesthesia found on examination was probably present at the time when the fingers were frozen. The wrist was loose; the ends of the bone partly softened and partly absorbed; spontaneous dislocation had occurred as was shown by the fluoroscope. The symptoms elicited by physical examination were quite characteristic of syringomyelia.

The second case was one of tabes, with the various tests of the blood and spinal fluid, positive for syphilis. A few months before coming under observation an enlargement appeared in the lumbar region with impaired motion. Then suddenly a prominence appeared at the third and fourth vertebra—the third had slipped over the fourth, pressing on the cauda equina, causing paresis of the abductor muscles. A brace was fitted which enabled the patient to be up and walk about carefully.

This case was ended by sudden death, thought to be due to embolism.—*Medical Review of Reviews*.

OBSTETRICAL

A STUDY OF THE MENOPAUSE.

Culbertson (*Surgery, Gynecology and Obstetrics*, December, 1916) concludes his article as follows:

The menopause is a functional derangement on the part of various glands of the endocrine system subsequent to the cessation of the ovarian secretion.

On this basis may be explained the psychic and somatic manifestations of the menopause.

The vasomotor disturbance represent an instability of arterial tension.

In the majority of cases this takes the form of a vacillating hypertension, both systolic and diastolic.

The diastolic pressure is not elevated proportionately to the systolic. This produces an increased pulse-pressure.

Hot flushes, sweating, and other vasomotor symptoms are directly created by the vacillations in arterial tension.

In a minority of cases there is arterial hypotension, and here also the systolic and diastolic pressures are out of proportion.

Hypertension is apparently due to a relative oversufficiency on the part of the hypophysis or the adrenal.

The psychic symptoms are apparently influenced by thyroid dysfunction—in the majority of cases a hyperthyroidism, in the minority a hypothyroidism.

The administration of the missing hormone, represented by the extract of corpora lutea from animals in early gestation, brings about a gradual restoration to normal of the blood-pressure with disappearance of the mental symptoms.

This reduction of blood-pressure by organotherapy, together with the disproportionate systolic and diastolic rise, is offered as evidence that the hypertension is a functional one and not due to organic changes.

Blood-pressure estimation is essential, as a means both of measuring the degree of menopause disturbance and of controlling its therapy.

An occasional pressure reading is of little or no value. Tension must be determined at frequent intervals, preferably daily until improvement is well under way.

The significance of functional hypertension as a factor in uterine hemorrhage is obvious and will be made the subject of a subsequent report.—*The Therapeutic Gazette*.

RADIOTHERAPY OF UTERINE NEOPLASMS.

Klein here reports the present findings in women treated at the Munich clinic. The Roentgen rays are combined with radium and radio-active substances and a preparation of radium barium selenate is injected intravenously. The exposures are made about once a month until there are no more clinical evidences of the cancer. Over 18.5 per cent of the ninety-two patients with inoperable malignant disease of the uterine cervix have had no further sign of trouble during the interval since. It ranges from four months to three years. About 50 per cent of the thirty-two operative cases are still free from recurrence after an interval of from twelve to eighteen months, although in half of these there had been recurrence from one to three times before. One patient who had had a mammary cancer return three times previously, has been free from recurrence during the five and a half years to date, since the actinotherapy. His numbers are small, he admits, but the subsidence for several years to date of inoperable uterine cancer and the absence of further recurrences in the previously recurring operative cases are features unknown with exclusively operative measures. Even those who have succumbed to their cancer were given a year or more of life and freedom from clinical disease. Smooth and complete healing was the invariable rule with cancers of the face. A complete cure was realized also in all cases of uterine fibromas and in nearly all of myomas.—*The Journal of the American Medical Association*.

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M. D., corner Sumner and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

THE LARGE INCISION.

If there is one stumbling block against which many surgeons bump more than any other it is the short incision. The only way to account for this is that in preaseptic days the short incision was considered the better, since most wounds suppurated and the shorter the incision the shorter the period of suppuration. Tradition then is probably the best explanation of this predominating surgical fault and tradition is hard to overcome.

The long incision heals as rapidly as the short one, much more rapidly if, in order to get a good operative field the walls of the short incision are widely retracted and traumatized. Traumatization invites infection and infection delays restitution. Aside from the better healing of a non-traumatized wound there are the many advantages of a good exposure of the field of operation. With a good exposure and everything accessible, the most difficult surgery resolves itself into a knowledge of anatomy and pathology and an ability to cut, tie and sew which, it must be confessed, in the average good surgeon compares very unfavorably with the ability of a seamstress to do the same things.

In visiting clinics we try to judge an operator by his work more than by his reputation and we have found that the surgeon who makes a free incision and obtains a good exposure usually gets in and gets out quicker and better than some with big reputations who measure their skill in reverse ratio to the length of their incision.—W. T. B.

THE AMERICAN MEDICAL ASSOCIATION.

The annual meeting of the American Medical Association will be held in New York City, June 4-8, 1917, and as this is the first meeting held in that city for many years a record-breaking attendance is predicted. We are in receipt of the program of clinical sessions that has been arranged for this meeting and regret very much that lack of space prevents the Journal from publishing. We can see, however, from this full program that the clinical arrangements will prove a feature of the reunion. Every physician who can possibly arrange it should make an effort to attend this representative body and take his part in the transactions of the body, even if that part be only his presence. The upheaval of the impending War and its influence on medical men and medical matters should make it a duty of everyone to attend this national medical organization.

MIDDLE TENNESSEE MEDICAL ASSOCIATION.

We acknowledge the receipt of program of the forty-sixth meeting of this flourishing society, representing the profession of this central section of the State, which meeting is to be held in Fayetteville, Thursday and Friday, May 17 and 18. This society meets twice annually in different cities of the mid-state and is made up of a large membership of the representative physicians of this section. The papers announced for this meeting are on live subjects by live men and much pleasure and profit is promised to those attending. We wish for the association a successful meeting this time and a large and useful existence for the future.

"HEALTH IS WEALTH."

Mr. Citizen, have you taken into consideration in making plans for your material welfare during the coming summer and fall, that the health of yourself and your family may determine whether or not this is to be a successful year for you? If you are a merchant, have you stopped to reflect that a case of typhoid

fever in your family will affect your assets in exactly the same way as the loss of a valuable shipment of merchandise? If you are a farmer, has it occurred to you that such an illness may offset the value of a bountiful crop on many acres of your land? If you are a wage earner, have you considered that illness of yourself or a member of your family will materially affect the plans you have made for the investment of your savings?

You have thought, of course, of how unfortunate it would be for such illness to "happen" in your family. You have insured your merchandise against loss. You have insured your house and barn against fire. You have perhaps even taken out an insurance policy to provide for the necessities of life for your family in case you become ill. But have you given to the question of PREVENTING such illness the thought and study that so important a matter deserves? And many of our most serious and costly diseases are entirely preventable.

The United States Public Health Service devotes much of its time and effort to the study of these preventable diseases, and has issued numerous publications containing the fundamental principles of disease prevention. The titles of a few of these publications are here given. Any or all of them will be sent to you free of charge on request:

"Good Water for Farm Homes," Public Health Bul. No. 70.

"Typhoid Fever—Its Cause and Prevention," Public Health Health Bul. No. 69.

"Prevention of Malaria," Reprint No. 170.

"The Prevention of Pellagra," Reprint No. 307.

"Tuberculosis—Its Predisposing Causes," Supplement No. 3.

"Hay Fever and Its Prevention," Reprint No. 349.

"Infantile Paralysis," Reprint No. 350.

"Malaria—Lessons on Its Cause and Prevention," Supplement No. 18. (For use in schools.)

"Fighting Trim—The Importance of Right Living," Supplement No. 5.

"What the Farmer Can Do To Prevent Malaria," Supplement No. 11.

"The Care of the Baby," Supplement No. 10.

DO YOU KNOW THAT

Being healthy is the first duty of a citizen?
 Disease is the greatest foe to human progress?
 It's the unused body that deteriorates quickest?
 Fly destruction is its own reward?
 A walk in the open is worth two in the house?
 Personal hygiene is the first requisite for community health?
 A small mosquito is a dangerous thing?
 Most of the diseases from which man suffers are peculiar to man?

AMERICAN PROCTOLOGICAL ASSOCIATION.
 PROGRAM.

Commencing June 4, 1917. Executive Council meets at 8 a.m.
 Annual Address by the President: "The Place of the Proctologist
 in a Diagnostic Group"—Alfred J. Zobel, San Francisco, Cal.
 Memorial Address: "Our Late Member, George J. Cook, Indian-
 apolis, Ind.—Alois B. Graham, Indianapolis, Ind.

PAPERS.

1. Adult Rectal Prolapse; Two Cases and a Contrast—Ralph W. Jackson, Fall River, Mass.
2. Adenomyoma of the Rectum—Frank C. Yoemans, New York City, N. Y.
3. Summary Reports of Nine Cases of Peri-Colic Membrane—John L. Jelks, Memphis, Tenn.
4. Should the Sphincters be Divided?—Rollin H. Barnes, St. Louis, Mo.
5. Neglected Rectal Examination—James A. McVeight, Detroit, Mich.
6. Enemas and Colonic Flushing as Etiologic Factors in Appendicitis—William M. Stauffer, St. Louis, Mo.
7. The Relationship of Hemorrhoidal Disease to the Health Balance—William M. Beach, Pittsburg, Pa.
8. The Underlying Factors of the Clamp and Cautery Operation for Internal Piles—W. Oakley Hermance, Philadelphia, Pa.

9. The Pathology of Hemorrhoids—J. Coles Brick, Philadelphia, Pa.
10. Report of a Case of Idiosyncrasy to Quinine and Urea Hydrochloride—Collier F. Martin, Philadelphia, Pa.
11. Neoprectology—A Glimpse Into the Future—Jerome M. Lynch, New York City, N. Y.
12. The Post-Operative Factor in Rectal Surgery—Barney J. Dryfuss, New York City, N. Y.
13. The Non-Surgical Treatment of Splanchnoptosis—Rolla Camden, Parkersburg, W. Va.

Rectal Clinics will be held by Drs. Samuel G. Gant and Jerome M. Lynch. The hour and place will be announced later.

AMERICAN REMEDIES FOR CHINESE AILMENTS.

China will soon be the greatest market in the world for proprietary medicines, according to a bulletin issued today by the Bureau of Foreign and Domestic Commerce, of the Department of Commerce, to call the attention of American manufacturers to the advantages of getting a good foothold in the market at once.

"Hygiene is practically unknown among the Chinese," the report states, "and the sickness and suffering to which the masses are subject on account of the lack of efficient native remedies or treatment is probably greater than in any other country. This is especially true of all varieties of skin diseases, against which no native salves or blood tonics seem effective."

Ten years ago the proprietary-medicine trade in China was hardly worth mentioning, although foreigners had been laboring for twenty years or more to develop it, but immense strides have been made since then and ample profits have been realized. The trade, however, is still in its infancy.

Through judicious and persistent advertising the natives are gradually being educated to the necessity of paying some intelligent attention to their ailments and are responding remarkably well. For this reason it is not difficult to introduce a good article

at a reasonable price, if supported by the right kind of advertising.

The Bureau's report is devoted chiefly to sales methods and advertising and the material presented on these subjects is new and important. Copies of the bulletin, which is entitled "Proprietary Medicine and Ointment Trade in China," Special Consular Reports No. 76, may be purchased for 5 cents from the Superintendent of Documents, Washington, or from and district office of the Bureau of Foreign and Domestic Commerce. It contains 12 pages.

A WORD TO OUR ADVERTISERS.

We are pleased always to give space to our advertisers in the shape of reading notices in every issue, but in view of the fact that the size of our monthly issues has been reduced considerably must request that these reading notices be abridged as much as possible so as to not encroach on the reading matter proper of the Journal.

Reviews and Book Notices

Cancer—Its Cause and Treatment, by L. Duncan Bulkley, A.M., M.D., Senior Physician to the New York Skin and Cancer Hospital, etc. New York, Paul B. Hoeber. 1917.

We acknowledge with thanks to the obliging publisher the receipt of a copy of this valuable book. The author is well known for his numerous contributions to the science of medicine and our readers will realize that anything that emanates from him will be up-to-date and helpful to everyone interested in the vital subject treated of by the author in this book. The fact that the dread disease is on the increase in this country and in the world should render a study like this of eminent importance to the profession. The book is made up of six lectures delivered at the New York Skin and Cancer Hospital in November and December, 1916, as follows: Lecture I, Cancer as a Medical or Surgical Disease; Lecture II, Influence of Sex, Age, Occupation, Race, Climate, and Food on Cancer; Lecture III, The Mortality from Cancer; Analysis of Surgical Statistics; Lecture IV, Inoperable and Incurable Cancer; Metastases; The Blood in Cancer; Lecture V, Dietetic and Medical Treatment of Cancer Prophylaxis; Lecture VI, Results: Personal Cases—Summary. The Real Cancer Problem—Index—The scope of this excellent and painstaking work can be seen by this table of contents and our readers would do well to secure copies of the work.

Publisher's Department

NOTIFIABLE DISEASES.

The growing tendency of manufacturing chemists in presenting to the profession books and brochures containing valuable data, outside of the references made to their particular proprietary remedy, encourages the preservation of this literature on account of the real educational value of its contents.

Under the above title, comes to us a brochure of many pages, issued by The Purdue Frederick Company, of 135 Christopher Street, New York, manufacturers of the well known Gray's Glycerine Tonic Comp. Formula Dr. John P. Gray.) This booklet gives not only those diseases that should be reported to the Board of Health, but with each disease, a clinical description, the cause, how transmitted, incubation period, characteristic symptoms, prognosis, durational quarantine, school regulations, and disinfection.

It is really a time and labor saver, and if you have not received a copy we are sure that a card addressed to the above mentioned firm will place one in your hands.

WHEN THE IODIDES ARE INDICATED.

In latent syphilis and those many other chronic conditions indicating the exhibition of iodine, it will be found that the administration of IODA (Battle) meets the therapeutic needs, and makes possible the introduction of iodine into the system without throwing too big a burden upon the digestive tract. In preparing IODIA (Battle) the idea in mind has been to secure a high degree of iodine influence without deranging the gastrointestinal function. For this reason IODIA (Battle) is of such usefulness in cases requiring the long continued administration of iodine.

HASTENING RECOVERY FROM GRIP AND PNEUMONIA.

It is during convalescence from grippal conditions and pneumonia that the need for an agent to augment tissue resistance becomes a most important consideration. For more than twenty years Cord. Ext. Ol. Morrhuae Comp. (Hagee) has shown its special value as a reconstructive during the recovery from bronchial and pulmonary conditions, a value that rests largely upon the case with which the depleted system assimilates the essential elements of cod liver oil which Cord. Ext. Ol. Morrhuae Comp. (Hagee) contains. For the purpose mentioned this preparation is standard.

POST-OPERATIVE QUIET AND EASE.

It frequently happens during convalescence from a surgical attack that the patient is restless and does not secure his customary sleep. The surgeon hesitates to use narcotic and depressing agents owing to their ill after effects. PASADYNE (Daniel) lacks these evil qualities and hence is adapted in high degree for use in post-operative convalescence. Many surgeons now employ it routinely, having determined its therapeutic potency and, at the same time, its innocuousness. PASADYNE (Daniel) is nothing but a concentrated tincture of *passiflora incarnata*. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Ga.

CHRONIC CONSTIPATION OF WOMEN.

In the treatment of this condition, what the physician may expect INTEROL to do is the following:

(1) It keeps the feces from becoming dried and hard. That is, it keeps them *soft and plastic*; (2) and in addition, by *lubricating* them, it (3) enables them to squeeze or slip through angulations, convulsions and constrictions of a crowded gut (4) at the same time, there is a *protective* action to any raw or abraded spots.

By doing these things INTEROL relieves fecal pressure and gaseous distension, so that the autotoxic as well as nervous symptoms are likely to be reached.

All these it does effectively and harmlessly. Its use does not prevent the adjunctory use of any orthopaedic, surgical or other procedure that may be indicated. On the contrary, INTEROL itself is more an adjunct to such other measures.

INTEROL is unquestionably all that it is claimed to be—a valuable “dietetic accessory.” There is no other accessory measure that will better accomplish what INTEROL does accomplish in cases where it can accomplish it.

DOSAGE is usually a tablespoonful morning and night on an empty stomach, although this varies with the individual peculiarities.*

In PREGNANCY where elimination is deficient, as indicated by headache, slight disturbance of the digestion and diminution of solids and urea in the urine, sanmetto in connection with calomel is remarkably effective. The calomel acts upon the cells of the body, those of the liver especially, effecting proper removal of the waste and accumulated toxins. Sanmetto increased the activity of the kidneys, in this way promoting the removal of excrementitious products from the blood, and at the same time acts as a systematic tonic enabling the body to more completely dispose of its waste products through its organs of elimination and resist the evil effects from systemic absorption of auto-toxins.

“I have used Tongaline for more than twenty years and have found it most satisfactory in every way. A very recent case which came under my

*Booklet and samples to physicians. Van Horn and Sawtell, 15-17 E. 400 St., New York.

care was one in which several physicians had failed, even with the use of organo-therapy. Within forty-eight hours after Tongaline had been administered there was a decided remission of temperature and pain and at the end of one month the patient, who was a lady about seventy years of age, and had been a sufferer for years, was able to go about her room and to comb her own hair, something which she had not done for six months previously."

"I prescribed Tongaline for two cases of tonsillitis, after all other treatment had failed, with such success that both made a rapid recovery."

NASHVILLE JOURNAL

— OF —

MEDICINE AND SURGERY

CHARLES S. BRIGGS, A.M., M.D., Editor.

W. T. BRIGGS, B.A., M.D., Associate Editor.

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Original Communications

ALCOHOL NOT ALWAYS THE PRIMARY CAUSE OF INEBRIETY.

BY T. D. CROTHERS, M.D., HARTFORD, CONN.

Until within a comparatively recent time, alcohol has been considered a stimulant and tonic. This theory, coming down from the past, has been unquestioned. Laboratory teachings, confirmed by exact clinical research, show that this theory is fallacious; that alcohol is not a stimulant or tonic, but an anesthetic and depressant, and that the real causes of the fascination, comes from its power to cover up fatigue, pain and bad feelings. Instead of giving strength and new vigor to the body, it simply conceals the conditions, previously existing. This is confirmed by careful observation by the profession, and has brought about a revolution of theory and practice that the younger men adopt quickly and the older men regard with some doubt yet.

It is a curious fact that in Roman civilization, insanity was considered an obsession of the devil, and inebriety and drunkenness, simply as a sickness, dependent on physical conditions. Up until the last century inebriety and alcoholism were considered moral disorders and insanity was considered a disease.

The moral theory of the causes of drinking, has come down even to the present time, although not often mentioned, except among laymen. There are men in the profession today who talk very decidedly about the vice element. The late Dr. Gray of Utica was very emphatic in his opinion that all drunkards were vicious and suffering from a moral disorder. The profession, generally, have recognized a range of physical causes, of which alcohol is supposed to be the principal and only one, as responsible for the evils which follow from its use.

The curative efforts by reformers and laymen generally, and to a large extent, those of the profession, have been based on the assumption that alcohol was the principal and special cause, and its removal would be followed by complete restoration.

When individual histories of alcoholics and inebriates are studied carefully, and the physiological and psychological causes which dominate life are determined, a new range of forces appear. What was supposed to be the principal cause, is often only a symptom of other conditions unknown. When these conditions are removed, the desire for alcohol disappears. The clinical evidence supporting this fact is very extensive.

A few examples will illustrate this:

A most exemplary clergyman, a total abstainer, after a blow on the head from a fall, became a most inveterate inebriate, drinking continually and to great excess. After two or three years of the most wretched existence he died and a post mortem showed a fractured skull and a bone pressure on the brain.

An old soldier with a running sore from a necrosis of the fibula, was, for a few years, a most incorrigible drunkard, until finally the dead bone was removed, and the wound was healed, and he stopped all use of alcohol, and lived many years a total abstainer.

A prominent banker drank at intervals and could not abstain only for a brief time, notwithstanding his various efforts. He finally gave up, and went to Colorado and lived out of doors, and made a complete recovery. Here unknown causes were at work, not climatic or any one thing, but something had taken place, and the drink craze died out.

Another prominent club man who drank to intoxication, nearly every night, changed his business and moved to a neighboring city, and stopped all use of alcohol. Every effort before this had failed and this last effort he ascribed to some insignificant cause, but it was evident that other causes existed, unknown to himself, and the removal of these was followed by the subsidence of the drink craze.

The most diverse explanations and theories of why men drink and what means are used to stop them, have developed a literature that is confusing and unverifiable. This shows that the real causes were unstudied and unknown and the results did not come from the curative measures claimed.

Out of the thousands of persons who sought help from the earliest empiric institutions, a certain number permanently recovered and believed that the drugs and other mysterious methods used were the direct causes of cures. However varied the treatments might be, as a rule, temporary restoration followed in a very large portion of cases. A certain number were unduly elated and credulous to the last degree, in believing that the real causes of the drink evil had been driven away, and that they could not take it any more. After a time the impression that they were immune weakened, and they experimented with themselves, to show whether it was true or not, and relapse followed. In persons in whom the psychological causes were prominent, the influence of mysterious drugs, and the personal and dogmatic suggestions of the physician that they would never drink again, permanently impressed their mental condition. In others this impression faded, and relapse followed.

In all these empiric efforts, there was only one thought, that alcohol was the only and specific cause, and the removal of this and aversion for it would prevent its use again. The claims that 95 per cent were cured, were undoubtedly justified by the experience of the first few months, but when the time was extended to the same number of years, the percentage of failures equaled the former claims of cure.

There was something very suggestive in this wave of empiricism, which sought to find means of cure and prevention,

based on the one fact that the removal and disgust for alcohol were the ends to seek for. These various means and methods attracted a vast army of incurables, and aroused a most extravagant public sentiment of the possibilities of relief. Literally they educated public sentiment and in that way they were of inestimable benefit indicating physical means and measures, due to alcohol alone that was doubted before. In another way, they taught the public and the army of incurables that temporary and possibly permanent relief could be secured by using physical means and measures.

The evidence of this change is seen in every insane asylum, hospital and almshouse, and sanitariums for inebriates and alcoholics, in the increasing number that come for treatment. Most of these men are satisfied with temporary relief and go away after a few days or weeks restored, indicating beyond question an increasing hope in the possibilities of permanent restoration and cure through physical means.

The term rounder is used to describe a class of people who appear in the police court for petty assaults and crimes. The same term is used now to designate a class who appear in hospitals, both public and private, many times every year, for relief from their alcoholic addiction. After a time, they relapse so frequently that they have to be committed for a longer period of time.

In all these institutions, the central fact is, that alcohol and its removal constitutes the complete cure. The restraint of the institution helps in some way, and in others chemical restraint is regarded of equal value. In some institutions chemical restraint is the most prominent remedial measure. It is assumed that if the desire for alcohol can be held in abeyance by narcotics, it will disappear after a time. The other symptoms, such as the relief from toxemias, congestion and local conditions of the various organs, are regarded as secondary. In other places psychical suggestions and appeals to the fears and pride are regarded as essential. The patient is made to believe certain distinct facts concerning the perils from the use of alcohol.

In a number of instances, these varied means, while apparently convincing the patient, fail to break up the delusion and hope of

the possibility of being a moderate drinker, and this results in the attempt in the future, to repeat the same experiment again, hoping that by some possible change he might be able to use beer or wine in small quantities for the remainder of life.

In all the various drug combinations, which physicians are using, the one central thought is, to break up the alcoholic obsession, and there is no thought of anything farther than that, other than an entailment from disabilities, directly due to spirits. Every now and then an acute observer is conscious of other causes than alcohol, and when he directs his efforts to the removal of these, he is astonished at the rapidity in which the alcoholic impulse dies out.

The efforts of laymen show how ill advised and how thoroughly materialistic, and often unreasonable are the theories on which their relief work is based. The literature is an astonishing combination of statements and opinions, with little or no reference to any other cause than alcohol.

The periodic drinker furnishes the most suggestive illustration of causes farther back provoking the paroxysm. After a period of total abstinence, and in apparently most favorable circumstances, he will suddenly develop a paroxysm for drink that is a veritable insanity. This dies away followed by an acute remorse and consciousness of the loss he has suffered only to be followed by another paroxysm. Alcohol can not be the cause here, but is only a symptom, and yet, little or no observation has been made to determine the causes.

Quite a large proportion of these persons, whose drink impulse is more or less secret, become very warm supporters of certain drug combinations and certain institutions, and certain means and measures of cure, claiming that they have been permanently restored by these means. Often it is the pledge, the prayer, the conversion, the secret remedy, the personal influence of some physician, clergyman or relative, and for a time they pose as examples and even take a part in helping others, who fail to receive the same benefits. Then suddenly they fall back again, and drink as before.

There is great confusion in the writings of physicians and statements of patients, and all because such persons are never studied physiologically or psychologically. The real causes which provoke the drink craze are unknown. As a result, the methods of relief fail. Such persons are enigmas to reformers and laymen and largely to thoughtless physicians who accept the common theories that alcohol is the sole and chief cause.

The psychopathic hospitals are based on the fact that the causes of disease, particularly of the mind, are traceable from exhaustive studies of the varied conditions of living and thinking, and a species of re-education pointing out to the patient how to live in the most hygienic way to preserve and develop his energies.

There is a vast army of so-called moderate drinkers who are generally very active brain workers, and who use spirits in small quantities daily or at intervals and are more or less conscious of the possible danger in this direction, a danger that comes from experience and observation. While they excuse themselves and give reasons for the continuous use of spirits, and feel confident that they can stop at any moment, there is an increasing desire for help from some source; a longing to find some means for relief. Often these persons resort to quack drugs in secret, take long journeys, put themselves in positions where spirits are difficult to be procured, hoping in this way that they can overcome a so-called habit, which might become serious. They very seldom appeal to physicians for help and so drift down through the years, until some disease appears or some great revolution takes place in their life. Then the long wished strength to abstain is manifested.

In all these cases, there has been no thought of any other cause, but alcohol. Both the periodic and moderate drinker have never been studied scientifically. No one questions why alcohol is fascinating and why it comes to be regarded as essential to the health and vigor of the brain worker, as well as the poor laborer, and why it is called for by the pauper and the millionaire with the same persistency and urgency as food.

A Research Foundation has been established at Hartford, Connecticut, for the purpose of taking up this subject. It proposes

to study the histories of persons minutely and find out what causes, other than alcohol, are prominent in the desire for its use. The question of why men drink is a scientific one and can not be studied from a moral or sociological point of view. It is one of facts and their meanings, and a Foundation with expert examiners and appliances to make exhaustive examinations of the victims and studies into this new field of causes, is along the line of the highest scientific work of the present.

The alcoholic evil with all its diseases and associations, can never be understood, until such exact studies are made, until some exact knowledge is ascertained from the histories of large numbers of persons, showing what physical and psychical causes, predispose and lead up to the use of alcohol.

This Research Foundation will be endowed and become a permanent work and really become a clearing house, where persons can be examined to determine what measures of treatment and prevention are most practical.

There are almost innumerable persons who use spirits in moderation or occasionally to excess who, from observation and experience, are vaguely conscious of danger from this source. They would like to stop, but have no means of knowing how and where they can receive benefit through counsel and advice.

Such persons do not want drugs or sanatorium treatment and have very confusing notions of the possible relief from other sources. They will heartily welcome any effort that will enable them to understand their own condition and to determine what are the best means for possible relief in the future.

This Foundation will give much prominence to hereditary conditions. Already studies have been made in this department which indicate a great variety of new facts not yet understood by the profession. Psychical studies will also be very prominent, and an effort will be made to know what influences of this class have fashioned and shaped the future of the individual, giving a susceptibility to the narcotism of alcohol, or a peculiar immunity; also what physical changes have predisposed and favored the demand for relief from alcohol.

At present these conditions are unknown to a large extent, and are so mixed up with theories and dogmatic opinions, that only a Research Foundation can make clear. The present treatment of inebriates and alcoholics is in a most confusing state, simply because the facts on which the various efforts are based are unreal and often unverifiable. This Foundation will clear up this confusion, and not only group the present facts, but add to them immensely and lift the whole subject out of the realm of guess work and empiricism and make it possible for physicians to treat such persons with as much certainty as those suffering from any other disease.

Selected Articles

PROGNOSIS.*

BY PAUL H. RINGER, A.B., M.D., ASHEVILLE, N. C.

Every physician is asked upon his initial visit to every patient two questions: "What is the matter?" and "What is going to happen?" Thus at once he is requested to give utterance to his diagnosis and to his prognosis. It is noteworthy that so much more attention has been given to diagnosis than to prognosis in modern times. Whole libraries are to be found dealing with the former, while books or articles dealing with the latter are few indeed. Of course a proper prognosis presupposes an accurate diagnosis; yet all physicians are again and again forced to formulate a prognosis without having an absolutely accurate diagnosis very clearly in mind. Among the laity physicians are famous, if not infamous, for their unwillingness to commit themselves, and this reputation rests unquestionably upon the matter of prognosis. No man wishes to go on record as an absolute positivist in a matter in which there is such liability to error as prognosis. Hence, the "may," the "but," the "if," all of which go to make prognosis one of the most proficient examples of "the gentle art of hedging."

It is a far cry from the "Prognostics" of Hippocrates to Elsner's "Prognosis of Internal Disease" issued but a few months ago, and to the credit of the Master of Medicine is it that many of his observations and forecasts hold good today over the lapse of twenty-five centuries and at a time when advances and discoveries in medicine succeed one another with tremendous rapidity. The "Hippocratic facies" foretell impending death as accurately today as it did when Hippocrates first described them: "From

*Read before the Buncombe County (N. C.) Medical Society, February 5, 1917.

a spitting of blood there comes a spitting of pus" (a prognostic statement) is today universally recognized, and none but the foolish will go contrary to the dictum "in acute disease it is not quite safe to prognosticate either death or recovery." The ancients devoted far more study to the question of prognosis than do we, but their prognostics were based almost exclusively on symptoms. On reading the works of Hippocrates, one is struck with the mass of symptoms observed, and the different prognostic value attached to each, a value far in excess of that which is given today. The ancients, however, used to the extreme limit the value of the data to be determined by observation. Having no pathology, no physiology save of the crudest (and, as we now know, falsest) nature, no conception of bacteriology or immunity, it is but natural that symptoms formed the foundation, edifice and superstructure of all their prognostic conclusions. Having but elementary modes of treatment, many of them, as we now know, based on false premises and incapable of doing good, the ancients could consider but very slightly the effect of treatment on disease. So, all honor to the sober, earnest and observant pioneers in medicine who, despite their slender knowledge and awful handicaps, were able to lay down so many fundamental laws that have lasted to this day, and that will survive as long as man continues mortal.

The nature of modern prognosis is radically different from that of ancient prognosis. Having at our command a well worked-out system of physiology, an ever-increasing knowledge of pathology, countless laboratory facilities for demonstrating the condition of the various organs and systems of the body as well as other procedures for estimating their functional capacities, having the knowledge gained at the operating table and at the necropsy room, we are in a far better position to make an accurate and precise diagnosis. Upon this as a basis must of necessity be grounded our forecast of the future. Hence, in contradistinction to the symptomatological prognosis of the ancients, modern prognosis is essentially based on diagnosis.

Furthermore, with the many agencies at our command, prognosis can not be considered apart from treatment. We have

passed the time when we can say, as our predecessor of one hundred and fifty years ago did:

“First I bleeds ’em,
Then I sweats ’em,
Then, if they wants to die,
I lets ’em.”

Who is there that can formulate a prognosis in a case of appendicitis with rupture and leave out of consideration surgical interference? Or who can consider the outlook in diphtheria without taking into consideration the administration of antitoxin? It may be said that extreme instances have been chosen; true enough, but such and such only will stress the point sufficiently. Our forefathers had but little of the therapeutic armamentarium that we now possess, and still less of an accurate knowledge of conditions with which they were dealing. Thus, with us, prognosis becomes an infinitely more complicated question when dealt with from the dual viewpoint of diagnosis and therapeutics than from the single standpoint of symptomatology. The nature of modern medicine is to attempt to bring it more and more into the domain of science, to attain as nearly as possible to the absolute, and to rely as little as possible upon the variable. However praiseworthy this trend may be (and praiseworthy it is, as it has as its object the attainment of exact knowledge concerning all manner of human ills), the final goal is unattainable, and from the very nature of the material with which their protean characteristics, resistive powers, susceptibilities, etc., the art of medicine will ever remain a most important element in practice.

This argument brings us by but a short step to the question of the nature of prognosis. Is it a science or an art? Unquestionably, an admixture of both, but, save in isolated instances, the *art* of foretelling the future will ever overshadow the science of prophecy. When all is said and done, after the taking of the most careful history, the completion of the most searching physical examination, the correlation of the most diverse and minute laboratory tests, the physician must over and above these add thereto the fruits of his own experience, his knowledge of the

"constitution" of the patient, his intuition, all of which—for reasons in the main empiric—inspire him with hope or with despair. These latter factors can never be gauged by an instrument of precision nor can their value be expressed in terms of quantity, but their importance is beyond measure and to their still small voices will the man of experience give keen attention.

Men are by nature either optimists or pessimists, and physicians, being men, must belong to one of these two groups. Every true physician should be an optimist, for only by walking through-out his own life on "the sunny side of the street" can he expect to dissipate the gloom with which he is daily brought in contact. The prognosis the physician gives must be in a measure influenced by his temperament, for the effects of physical conditions upon our minds is largely influenced by the color of the glasses through which we view the world. An optimistic prognosis at least to the patient is almost an essential. The question comes up again and again as to the advisability of telling the truth to patients fatally ill. It is but very rarely necessary to directly tell a patient that he will die. Sometimes, in the case of men with important business matters to arrange, the plain facts must be told. Relatives of the patient should always be informed as to the true state of his condition, that they may both be prepared, and realize that the physician appreciates the gravity of the situation. Even to them should be accentuated the fallibility of human knowledge, and every vestige of hope should not be withdrawn.

Shall the physician tell a deliberate falsehood to his patient that is not going to recover? It is well to avoid being too positive on the side of recovery, but the brightest possible side of the picture must be presented to the patient. We must remember that while, in the words of Hippocrates, "All the sick can not get well," our part is to soothe mental and physical anguish, to minimize pain, to comfort and sustain our failing patients as well as to cure disease. The cheery smile, the brightening word, the tang of virility and strength in the physician go far to cheer and reinforce the patient. And if, after all, death is to come, let it come to those for whom we care, finding them fighting, not think-

ing of defeat, but ever hoping, even against concrete evidence, for improvement. By so doing we are rendering the best service possible to our patient, and, in a very small percentage of cases, we will turn apparently certain defeat into relative or complete victory. For an optimistic prognosis is to a trusting patient the most powerful suggestion possible, and who is there that will deny the right, nay, the bounden duty, of every physician to make use of this psychic aid to recovery from organic disease?

The effect of an unfavorable prognosis upon the patient may vary all the way from loss of faith in the physician making the prognosis to suicide, and we have all seen both extremes. Of course, blind optimism in the presence of a positive diagnosis of serious disease is akin to malpractice and can but result in untold harm. The patient with tubercle bacilli in his sputum must not be dismissed with a cough mixture and the assurance that he merely has a slight bronchial affection; the individual with a carcinomatous ulcer on the tongue must not be allowed to go with the advice to "stop smoking and it will clear up." But while the patient must be made to realize the gravity of the condition and the necessity for proper therapeutic measures, we must endeavor to "temper the wind to the shorn lamb."

Finally, we must realize that the prognosis made has a decided influence upon the physician that makes it. Before our own eyes we must keep the candle of hope alight that, by its auto-suggestive action, our labors may be stimulated. Once having made an absolutely bad prognosis in a given case, we are almost invariably assailed by the thought, "What's the use?" and ever afterward we treat that patient with a lessened enthusiasm and with less keen professional skill because of our loss of faith in ourselves. We must bear in mind our own fallibility and we must recall the cases in which we have been mistaken and in which, if not recovery, at any rate marked improvement has followed our hopeless forecast. The man that has lost faith in himself has likewise lost faith in all else as well, and it is in order to buoy up our own failings and fallible selves that we must not allow all hope to depart.

Thus we see that prognosis as here reviewed is essentially an art, one in which the conscientious and capable physician must not exclude the cold, absolute facts of science; one in which he must be honest with himself and fair to his patient, seeing matters in their true light, and when that light is all grey, giving to the patient that spark of life which, though perhaps ill-founded, springs from a desperate and heartfelt wish on the part of the doctor that he may be in the wrong, and, in the expression of that wish, stretching forth the hand of friendship and of help to a fellow-being for so long a time as that hand can be held.—*Virginia Medical Semi-Monthly*.

Extracts from Home and Foreign Journals

SURGICAL

FRACTURE OF TRAPEZOID.

A Mouchet, *Presse Med.*, October 9, 1916, reports a case in a female weaver, aged 30, who was suddenly incapacitated while lifting a heavy bolt of cloth with the hand strongly flexed (50 kilos, with assistant lifting at each end of the bolt). A transverse fissure of the trapezoid alone was found radiographically, with a sort of dorsal eversion of the fragments. Warm bathing and a retentive dressing with a soft wad, resulted in healing in three weeks, but with an osseous projection on the dorsal aspect of the trapezoid. He considers isolated fracture of this bone as unique. —*Buffalo Medical Journal*.

A BULLET IN THE SPHENOIDAL SINUSES.

Capt. H. Elwin Harris, F.R.C.S., Beufort War Hospital (*The Lancet*, December 9, 1916). A soldier, aged 22, while being dressed for a wound over the left hip, was struck a second time and rendered unconscious. On recovering consciousness, blood was found trickling down the nose from the inner canthus of the left eye. On arrival at the hospital no wound or scar could be found either on the face or scalp, although there were swelling and paralysis of the eyelids and optic atrophy on the left side. Skiagrams showed "a bullet lying transversely and obliquely below the sella turcica; its base was seen in the left sphenoidal sinus and the body passed obliquely downwards and forwards through the septum between the sinuses, its nose resting in the roof of the right nasal cavity." The author thinks that the bullet entered at the left inner canthus, passed along between the eyeball and the inner wall of the orbit to the apex where it turned an

angle of more than 180 degrees and entered the sphenoidal sinus, wounding the optic and third nerves along the way.

The author describes his method of removal of the bullet, which was, briefly, as follows: He first removed the anterior half of the inferior and most of the middle turbinates from the left nostril. Later he broke through the anterior wall of the sphenoidal sinus, but was unable to get the bullet. Finally, with the patient under a general anesthetic on the X-ray table, he succeeded in cutting away the remains of the anterior sphenoidal wall and removing the bullet with a blunt hook. Recovery was uneventful. —*Pacific Medical Journal*.

CARCINOMA OF BREAST.

On August 18, 1916, patient, L. M., colored, female, came to me with the following history: Has had for some years a growth involving the breast, near the nipple, for which she had not received medical attention, but had treated it with poultices and other lay methods. When I saw her the nipple was practically covered by a large slough. The breast was freely movable over the chest wall, and in the axilla could be felt a number of firm glandular nodules. Operation was advised and carried out.

The most interesting feature of this case is the method which was employed to prevent contamination of the wound from the ulcerated area. By enveloping the breast in gauze and pinning it down with forceps hooked into the skin, we were able to protect the field of operation in a very satisfactory manner. I believe, however, that a sheet of rubber over this gauze would have added to the protection.

Incision was made in the usual manner. Of course, we handled the breast just as little as possible. The axilla was dissected free of glands and the wound closed, and, in spite of the presence of this infected area, primary healing took place.

To my mind, this case serves to emphasize the fact that the laity in general, and particularly the colored portion of our population, are densely ignorant concerning the danger of growths of

the breast; yet, at the same time, they have such a dread for cancer that they conceal the fact that they have a growth of the breast until, in many instances, the time for successful intervention has passed.—*Mississippi Valley Medical Journal*.

MEDICAL

SEPTIC SORE THROAT.

G. W. Henika, M.D., and I. F. Thompson, M.D., in the *Journal of The American Medical Association*, Vol. LXVIII, No. 18, give an interesting account of an epidemic of septic sore throat in Galesville, Wis. The epidemic lasted from February 26 to March 19, 1917, and 324 people out of a population of 941 were attacked with nine deaths. The contagion was milk-borne and the source was found in six cows in one dairy, the epidemic being ended by the segregation of the six cows and the instruction of the citizens to boil all milk and water. Only two cases could be classed as contacts.

The conclusion of the authors that "this epidemic furnishes additional proof that pasteurization of bottled milk under official supervision is the only method of securing a safe milk supply," is a fact that can not be too strongly indorsed.

THE EFFECT OF COLD ON MALARIAL PARASITES.

Experiment has demonstrated that many micro-organisms are far less sensitive to low temperatures than was believed to be probable in the earlier days of bacteriology, in view of the permanent damage or death which promptly ensues when the environmental temperature of these lowest forms of life is raised. The detrimental effects of heat have not found a counterpart in the influence of cold. Some bacterial species are known to survive temperatures far below those of the extreme cold occurring in nature. The possibility of a survival of other lower forms, such

as the plasmodia, under the adverse conditions represented by low temperature, has not in the past been equally well investigated. King, the government entomologist, has stated that the impression is gained from the literature on malaria that the development of malaria parasites in *Anopheles* is arrested at a temperature of about 60 F. and that the parasites themselves are destroyed at temperatures below this. He recognizes the importance of the question, since it involves the survival of infection in mosquitoes after hibernation or after exposure to low temperatures under natural conditions. In new experiments conducted in the Tulane University Medical Department at New Orleans, King has found that the parasite of tertian malaria in the mosquito host is able to survive exposure to a temperature of 30 F. for a period of two days, 31 F. for four days, and a mean temperature of 46 F. for seventeen days. In a smaller series of tests the sporonts of the estivo-autumnal parasite have shown a resistance to temperatures as low as 35 F. for twenty-four hours. This demonstration of the resistance of *Plasmodium vivax* and *Plasmodium falciparum* to cold and survival through a freezing temperature of several days' duration is significant.—*The Journal of the American Medical Association*.

OBSTETRICAL

RESUSCITATION OF APPARENTLY DEAD INFANT.

Last summer I was called to attend a case of midwifery in the Mellow Valley from a distance of 65 miles from Waterville. I got there five minutes after the baby was born. Found the cord had been prolapsed for fifteen to twenty minutes before birth and the babe was apparently dead, eyes rolled back and no sign of heart beat by careful auscultation.

I immediately whipped out my hypodermic syringe and gave it one-half cc. of pituitrin in the left hip, followed by immersion in a bath of warm water up to the chin and commenced traction on the tongue. In fifteen minutes I listened to chest and heard

the heart give a distinct impulse. Fifteen minutes later I gave it 1-240 gr. strychnine in the other hip. Listened to heart and counted an impulse of 15 to the minute. In two hours gave a small dose of digitalin in shoulder. Counted pulse about this time and heart beat was 130 per minute. The babe cried lustily in the meantime and I handed it over to its mother to nurse.

Someone in like circumstances may find this interesting. This is not original as I read of a case of a woman dead before child was delivered, where pituitrin, injected in the stump of navel, started its heart beating.—*Northwest Medicine*, April, 1917.

THE ACTION OF VERATRONE IN THE TREATMENT OF ECLAMPSIA.

In the *Edinburgh Medical Journal* for December, Haultain concludes from its use that it may be stated that we have in veratrone a drug of the utmost value in the treatment of eclampsia, as shown by its success in the treatment of thirty-eight consecutive cases. After the initial dose of 1 Cs. subsequent doses should be regulated by the blood-pressure of the patient, as by so doing it can be given with safety and to the greatest advantage.—*The Therapeutic Gazette*.

ANTISYPHILITIC TREATMENT OF PREGNANT WOMEN.

Cons relates that of five pregnant women with unsuspected syphilis, only two bore viable children and one of these soon died. The other woman had been given a dose of salvarsan twelve days before delivery and this child left the hospital apparently in good condition. Fourteen other pregnant women, mostly in the second stage of their syphilis, were given specific treatment during the pregnancy and all bore viable children. One child died a month later from a congenital heart defect; the others are all apparently in perfect health.—*The Journal of the American Medical Association*.

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M.D., corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

FEES.

While the practice of both medicine and surgery has been revolutionized in the last six or seven decades, there has been little, if any, change in fees. Surgical fees are still large, medical fees still small.

Before the days of anesthetics, antiseptics and asepsis and abdominal surgery, surgeons were few and far between, and few states could boast of many. Patients had to travel miles to reach the nearest, not necessarily the best, surgeon, and a surgeon's clientele, in spite of the inconvenience of travel, was oftentimes as large in neighboring states as in his own. Surgeons were scarce because it required an iron nerve to operate on a struggling, suffering patient, constantly slipping from under the knife in spite of ropes, straps and strong assistants; it also required courage to meet the inevitable postoperative complications, such as shock and suppuration, sepsis and hemorrhage; furthermore, it took courage to operate when public sentiment was against operation and when death nearly always held the best cards in the deck. But owing to the courage of those who chose surgery, marvelous advances have been made, and many of the barriers, which held in check the enthusiasm of young graduates for this very interesting branch of practice, have been lowered. Today surgeons are no longer scarce, on the contrary their number is legion. The number of surgeons, good surgeons, is so great today, that many of them would starve to death were surgical cases

as few today as fifty years ago. Such, however, is not the case, for the internists have generously turned over first one organ then another until today the surgeon has most of the body all his own, and what he has not, he is trying his best to get. Even the diseases which can not possibly become surgical are being torn from the internists' care by the scientific study of epidemiology of diseases, improved rural and municipal sanitation and public education in regard to the spread of diseases.

Improved therapeutics, even though he administers it himself, reduces his income, and the diminishing birth rate robs him of many obstetrical fees, which, though ridiculously small, are nevertheless large in proportion to his usual fees. And to cap the climax, comparatively few surgeons restrict their practice to surgery, so that here again the internist is the loser.

The above brief citation of facts does not tell the whole story but is sufficient. We do not say that surgical fees should be lowered, but we feel that internists should increase theirs, since otherwise internal medicine is doomed to retrogress from lack of good men in that particular branch of practice.

BETTER SANITATION NEEDED IN RURAL SCHOOLS.

In the interests of efficiency and health there is increasing necessity for the application of scientific medical and sanitary knowledge to the administration of the public schools, in the opinion of the Public Health Service.

In general, the faults observed in rural schools, the annual report of the Service declares, are due to a lack of skilled advice, especially in regard to the location, construction and equipment of school buildings and disregard of sanitary principles governing water supplies, the disposal of sewage, ventilation, temperature, illumination, and the arrangement of school desks and blackboards. During the past fiscal year surveys have been made in rural districts of several states and many thousand school children have been examined. These examinations have included thorough testing of the eyes by competent oculists, tests of men-

tal capacity, and the effect of sanitary environment on school progress, as well as inspections for the customary physical defects.

The conclusion is reached that there is great need for improvement in rural schools and that communities themselves will benefit if conditions are bettered, the schools serving as object lessons for surrounding sections. Conditions in country districts have been found below those in the cities, and it is apparent that organized health work has largely been confined to the latter. Considered from a sanitary standpoint alone the Public Health Service is in favor of the consolidation of rural schools, since it must eventually result in the providing of better buildings and the organization of systems of efficient sanitary inspections.

ACCURATE CONCEPTS IN ELECTRONIC DIAGNOSIS.

In the last issue of the classical quarterly, "The International Clinics," there appeared a contribution by Dr. Albert Abrams (AM. LLD. M.D., Heidelberg, F. R. M. S.) of San Francisco, bearing on the subject, "The Electronic Reactions of Abrams."

This is perhaps one of the most radical attempts ever made in medicine and in diagnosis. It is based on the fact recognized by physicists that, the ultimate constituent of the body is the electron and not the cell.

These electrons in their incessant activity create a field of radio-activity which always has a definite rate of vibration.

Unfortunately there are no instruments of sufficient sensitivity to enable one to detect these radiations.

The discoverer of radium demolished precipitously the established theories of matter and force so that chemistry was forced to be rewritten and our conception of this constituent of matter completely changed.

Abrams has found that the reflexes bearing his name and which have been fully exploited in the last volume of "The Reference Handbook of the Medical Sciences" are so sensitive that they can be utilized in the diagnosis of disease. Not only is it

possible to diagnose disease with mathematical accuracy, but one can measure with the same precision the virulency of affection. These methods have revolutionized the early diagnosis of cancer, tuberculosis, syphilis and other diseases. Thus we are able to say how different antisyphilitic treatment is when it is necessary and how long to continue it.

In a recent communication by George O. Jarvis, A. B. M. D., formerly of the University of Pennsylvania, he found, that the electronic tests of Abrams was positive in nearly 100 per cent of syphilitic infections, whether they were hereditary or acquired.

Another important feature of Abrams' tests is the ability to recognize congenital from acquired syphilis.

The reaction in syphilis like in other diseases, is always present.

Another feature of these reactions is the fact that a diagnosis may be accurately made from the blood. The discoverer of these methods is most anxious to introduce them to the medical profession and he invites correspondence with relation to the same. Specimens of blood sent to him and placed on a slide or paper will be gratuitously examined and reported on by him.

Any physician of sufficient intelligence may learn these methods provided he is capable of recognizing by percussion an area of dullness, and Dr. Abrams is most anxious to aid the profession in the interpretation of his methods.

Physicians are accordingly invited to write Dr. Albert Abrams, 2135 Sacramento St., San Francisco, Cal., for both a blood test and further information concerning his diagnosis methods.

OFFICERS OF THE AMERICAN MEDICAL ASSOCIATION.

At the recent meeting of the American Medical Association in New York City the following officers were elected:

President, Dr. Arthur Dean Bevan of Chicago; First Vice President, Dr. Edward H. Bradford of Boston; Second Vice President, Dr. John McMullin, U. S. Public Health Service; Third Vice President, Dr. Lawrence Litchfield, Pittsburgh; Secretary, Dr. Alexander C. Craig, of Chicago; Treasurer, Dr. Wil-

liam Allen Pusey of Chicago; Chairman of the House of Delegates, Dr. Hubert Work of Pueblo, Colo.; Vice Chairman, Dr. Dwight H. Murray of Syracuse, N. Y.; Trustees, Dr. Philip Murne of Atlantic City; Dr. W. T. Sarles of Sparta, Wis.; Dr. Bert Ellis of California and Dr. Wendell C. Phillips of New York City. Next place of meeting, Chicago.

DO YOU KNOW THAT

Peace hath her health problems no less than war?
 Constant vigilance is the price of freedom from flies?
 The physical vigor of its citizens is the Nation's greatest asset?
 Idleness is the thief of health?
 Infected towels spread eye diseases?
 Half the blindness in the world could have been prevented by prompt and proper care?

AMERICAN MEDICAL EDITORS ASSOCIATION.

This Association held its forty-ninth annual meeting at the Hotel McAlpin, New York City, June 4 and 5. Owing to the absence of the president, Dr. George M. Piersol of Philadelphia, due to his having been called to military duty at Fort Oglethorpe, the vice president, Dr. George W. Kosmak of New York, presided. Among the resolutions adopted by the Association were the following: Resolved, that the members of this Association pledge themselves to publish prominently, at least three times within the following three months, a copy of the official personal application blank with an explanatory comment on the proper procedure to be employed in transmitting the same to the Surgeon General's office. Resolved, that all medical journals in this country be urged to present editorially the needs of the military services in this crisis and the immediate necessity for securing the full complement of medical officers for the same. An appropriation of \$250 was made for carrying out the provisions of this

resolution. Resolutions were also adopted providing for the appointment of a committee to be known as the Food Resources Committee, which should do all in its power to stimulate interest on the part of all the members in a free and full discussion of the food problem as time goes on. The Association also voted to expend \$500 for the purchase of Liberty Bonds. The Association further pledged itself to unlimited effort in stimulating recruiting for the medical service of the army, and appointed a committee to further this end. The annual banquet was held at the Hotel McAlpin on the evening of June 5, at which the speakers were Dr. Henry O. Marcy of Boston, an ex-president of the Association; Dr. Joseph Bloodgood of Johns Hopkins University, who spoke on "The Duty of the Medical Man in this Great National Crisis;" Major Robert E. Noble of the Medical Corps of the United States Army, on "The Needs of the United States Army;" Talcott Williams, Ph.D., Dean of the School of Journalism of Columbia University, on "The Duty of the Hour," and Dr. Geo. F. Butler of Mudlavia, Ind., on "The Ladies." The following officers were elected for the ensuing year: President, Dr. Geo. W. Kosmak of New York, editor of the *American Journal of Obstetrics, Gynecology and Diseases of Children*; First Vice President, Dr. Robert M. Green of Boston, editor of the *Boston Medical and Surgical Journal*; second vice president, Dr. Seale Harris of Birmingham, Ala., *Southern Medical Journal*; secretary and treasurer, Dr. Joseph McDonald of New York, of the *American Journal of Surgery*; members of the Executive Committee, Drs. C. F. Taylor of Philadelphia, A. S. Burdick of Chicago, and D. S. Fairchild of Clinton, Iowa.

THE NEED OF MEDICAL OFFICERS FOR THE ARMY.

The Regular Army and the National Guard are to be increased to their full war strength. The selective draft has become a law, and in a short time 500,000 men will be in training. Twenty thousand medical officers are desired for active service and reserve. About 4,000 have volunteered. England and France also

require additional medical officers from this country; 200 a month, it is expected, will be sent. The need is imperative for young men with some hospital experience. The old men have volunteered, but young men are wanted. The opportunities for travel, for service and for gaining reputation are great. Now is the time to offer your services to the country.—*Maryland Medical Journal*.

"Hygiene is the art of preserving health; that is, of obtaining the most perfect action of body and mind during as long a period as is consistent with the laws of life." So wrote a man who devoted all his adult life to the promotion of the public health and who died at the age of 56 of pulmonary tuberculosis. Edmund Alexander Parkes, born March 29, 1819, physician, surgeon, sanitarian and author left perhaps a greater impress on sanitary science than any Englishman of the nineteenth century. His work ranges from the theoretical consideration of the minutest details of chemical and physiological research to the practical consideration of the cleansing of a sewer or the lightening of the soldiers' knapsack. India, the Crimea and London saw his labors and benefited thereby.

War brings some good things in its train. Just as the Napoleonic campaigns perfected the art of transporting the sick, and the loss of life from preventable disease in the Spanish War quickened the sanitary conscience of the American people, so the horrors of the Crimean campaign made Parkes a professor of military hygiene. He organized a complete course of instruction based on the principle that the student must be able to practically apply the lessons which he learned. Many of the sanitary reforms which he inaugurated are now bearing fruit in the improvement of the well-being of the community at large.

Health is the efficient reaction of the mind and body to its environment. Self-interest, state-benefit and pecuniary profit require that the whole nation be interested in the proper treatment of every one of its members and "in its own interest it has the right to see that the relations between individuals are not such

as in any way to injure the well-being of the community at large." This is being realized in the United States today as never before, and on every hand the general government, the State and local health authorities and the general public are seen striving toward the accomplishment of this ideal.

We note with deep regret the death May 16th of Dr. Winslow Anderson of San Francisco, for a quarter of a century editor of the *Pacific Medical Journal*. Not only as an editor but as a surgeon he was highly esteemed on two continents, and as an abdominal surgeon he had few equals and no superiors. His removal will be acutely felt by the profession of the West.

The deplorable tragedy at Sheffield, Ala., in which Dr. Hugh W. Blair of that city shot his wife and then committed suicide, which sad event took place June 13th, will be a great shock to his many friends and admirers. Dr. Blair graduated from the Medical Department of Vanderbilt University in 1883 and at once took rank as a successful practitioner in Sheffield, the scene of his labors and of his untimely death.

Dog fanciers have long noted that when a house-dog begins to get fat and wheezy it is pretty apt to be attacked by a stubborn skin disease. In such a case they cut down the diet and increase the open air exercise, thus relieving the over-burdened body of poisonous substances.

The sin of gluttony is common and therefore much condoned, but like every other violation of Nature's laws has a penalty. Fat inefficiency, sluggish mentality, the reddened nose, the pimpled face, certain of the chronic skin eruptions, and much fatigue and nervousness are due to the abuse of the digestive apparatus. Rich indigestible foods in large quantities, highly seasoned to stimulate the jaded palate, are forced into the body already rebellious from repletion. Exercise is largely limited to walking to and from the table and bodily deterioration proceeds rapidly. Many an over-

fed dyspeptic, suddenly dragged by the stern hand of circumstance from a life of physical ease and plenty and forced to work out of doors suddenly discovers that his semi-invalidism has gone, that a chronic skin derangement of many years standing has disappeared and that a new vigor and zest of life has been given him.

Not everyone can spend his whole time in the open air but a certain amount of exercise and plain wholesome food in an amount not exceeding the body's needs can be had by almost everyone. Simple moderate diet and exercise make for health. These are not faddish food theories: They are just plain common sense.

Reviews and Book Notices

Department of Commerce, Bureau of the Census, Samuel L. Rogers, Director. Mortality Statistics. 1915. Sixteenth Annual Report. Washington Government Printing Office. 1917.

This volume is the sixteenth annual report of Mortality Statistics prepared by the Bureau of the Census of the government of the United States. The value of such a compilation is incalculable to the statistician. The immense labor represented in the work and the accuracy with which figures of registration have been handled is worthy of the highest commendation. It shows the death rate throughout the registration area of the U. S. to be 13.5 per 1,000 population, the lowest rate for any year. Every disease with its death rate is carefully computed. The work is to be highly commended for its thoroughness and accuracy and will be of great importance as a work of reference.

Impotence, Sterility and Artificial Impregnation. By Frank P. Davis, Ph.B., M.D., Fellow American Medical Association; Ex-Secretary Oklahoma State Board of Medical Examiners; Former Superintendent Oklahoma State Institution for Feeble-Minded; Author of "How to Collect a Doctor Bill," "His Book of Poems," "The Physician's Vest-Pocket Reference Book," etc.; Formerly Editor and Publisher, Davis Magazine of Medicine. St. Louis. C. V. Mosby Co. 1917.

This little book contains much of interest for the general practitioner as it deals with subjects only lightly touched upon in general textbooks. The author has made a close study of the subjects treated of and has presented a book that conveys a great deal of valuable information in small compass. Our readers can get a good idea of the scope of the work from the contents. Chapter 1, The Sexual Instinct; Chapter 2, The Sense of Smell; Chapter 3, The Voice and Sense of Hearing; Chapter 4, The Sense of Sight; Chapter 5, Impotency; Chapter 6, Psychic Impotency; Chapter 7, Masturbation and Emissions; Chapter 8, Treatment of Impotency; Chapter IX, Race Suicide; Chapter 10, Sterility; Chapter 11, Treatment of Sterility; Chapter 12, Artificial

Impregnation; Chapter 13, Therapeutics. The work is by no means exhaustive but it contains much of interest and instruction for the general practitioner.

Handbook of Anatomy, Being a Complete Compend of Anatomy, including the Anatomy of the Viscera, a Chapter on Dental Anatomy, Numerous Tables, and Incorporating the newer Nomenclature Adopted by the German Anatomical Society, Generally Designated the Basle Nomenclature, Orthopædic Surgery, Philadelphia Polytechnic; Associate Professor of Orthopædic Surgery, Philadelphia Polyclinic; Associate Professor of Orthopædic Surgery, University of Pennsylvania; Orthopædic Surgeon to the Philadelphia General Hospital; Fellow of the College of Physicians, of Philadelphia; Fellow of the Philadelphia Academy of Surgery; Fellow of the American Orthopædic Association; Member of the American Medical Association, etc. Fifth Edition, Revised and Enlarged. With 154 Engravings, some in Colors. Philadelphia. F. A. Davis Co., Publishers. English Depot. Stanley Phillips, London. 1917.

We acknowledge the receipt of the 5th edition of this popular handbook of anatomy, revised and enlarged. The work is fully illustrated, the text is succinct and clean and the arrangement systematic and logical. The condensed arrangement renders its size particularly acceptable to students so that it should prove of exceptional convenience as a handbook in the studies of the dissecting room. In order to make the work thoroughly accurate and modern, it was deemed advisable to incorporate throughout the volume the Basle nomenclature or B.N.A. as formulated and adopted by the German Anatomical Society. A special chapter devoted to dental anatomy, properly illustrated, has been added, making it especially adaptable to the needs of dental students. We heartily recommend the work as an exceptionally useful textbook for students.

Publisher's Department

A SEDATIVE OF SUPERIOR WORTH.

The reason PASADYNE (Daniel) occupies such a high place in the therapeutic armamentarium of many hundreds of physicians is because of its potency as a sedative agent and its freedom from untoward effects. Thus, PASADYNE (Daniel) may be pushed vigorously and no depression or other disagreeable after-effect experienced. PASADYNE (Daniel) is merely a pure concentrated tincture of *passiflora incarnata*—a safe and satisfactory sedative.

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SPEAKING OF OPIATES.

The objections to the employment of opium and morphine are two-fold. Following their use there usually is depression or partial suppression of normal functions, and if the drug is given hypodermically or in such fashion that its character is easily recognized by the patient the formation of a habit comes into the realm of the possible. To a large degree PAPINE (Battle) obviates these disadvantages. In the first place PAPINE (Battle) is prepared with the greatest care and from the purest drugs. The name is not indicative to the lay mind of its purposes and thus the patient is protected from falling into a habit. All in all, PAPINE (Battle) is the opiate of first choice.

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A marked disadvantage attaching to the long continued use of the ordinary emulsion of cod liver oil is the gastro-intestinal distress thereby occasioned. In many instances this distress makes it obligatory to discontinue the oil's use.

It was to obviate this bad feature of cod liver oil administration that Cord. Ext. Ol. Morrhuae Comp. (Hagee) was perfected, and how well it has met the purpose for which it was intended is best shown by its wide popularity among the profession.

Cord. Ext. Ol. Morrhuae Comp. (Hagee) offers every advantage of the plain cod liver oil, and owing to its palatability and easy assimilation it may be used indefinitely without causing gastro-intestinal disturbances.

The salicylates have long been regarded by the profession as a potent anti-rheumatics, whose efficacy is unapproached by any other known medicine in the treatment of neuralgia, rheumatism, sciatica and other neu-

rotic lesions. Tongaline, from the character of its ingredients, is bound to possess special alterative and eliminative action, with positive affinity for the excretory system of glands, necessarily producing a thorough elimination of the toxic and morbid products of the system through the various emunctories. For rheumatism and gout; sciatica and lumbago, it is a remedy par excellence, its action being absolutely invaluable. In these diseases it thoroughly eliminates the toxæmia, which, under other treatments seems ever present, hindering convalescence and producing relapses. Tongaline here acts as an efficient alterative and eliminative, removing causes and effecting resolution."

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Have you some patient convalescing from some acute disease? Why not try Gray's? Send for samples to the Purdue Frederick Co., 135 Christopher St., New York.

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To anoint the skin in these conditions, K-Y Lubricating Jelly is not only effective, but convenient and economical, since it can be used without soiling the bed clothes or the patient's linen. If the part is washed before each application the best results are obtained.

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Original Communications

ENTEROSTOMY; A PERFECTED TECHNIC.*

JOHN WESLEY LONG, M.D., Greensboro, N. C.

Enterostomy should never be done as a matter of choice. It is not an operation of election if it be possible to successfully use any other method. On the other hand it is a life-saving measure and has rescued many a patient from an untimely grave.

The writer would not advocate a wider application of enterostomy, rather does he believe in a very restricted use of this invaluable operation. Every surgeon must, as a matter of course, be his own judge as to the indications for doing enterostomy, but it is surprising even to those who have given the subject careful thought that varying conditions may be relieved by the procedure. Many cases of intestinal obstruction are entirely cured by simply an enterostomy.

The indications may be roughly grouped as follows: First, to relieve temporarily patients suffering with intestinal obstruction, as from carcinoma of the colon; second, to safeguard an operation done at the same sitting, as resection of the bowel; third, to

*Read before the Southern Surgical and Gynecological Association, White Sulphur Springs, W. Va., December 12, 1916.

overcome the evil results of a previous operation, for instance, obstruction following abdominal section; and fourth, to establish an opening through which to feed a patient, as a jejunostomy done for inoperable conditions of the stomach.

An operation capable of such a high degree of efficiency and for so many conditions deserves to be standardized. That it is an approved operation is evidenced by the testimony of many surgeons, but so far no one has established a generally accepted technic for doing it.

For the purpose of illustrating the technic herein offered we may describe a case of intestinal obstruction following abdominal section. By the second, third or fourth day the bowels have not been moved nor has flatus passed. There are increasing tympany, muscular rigidity and abdominal tenderness. Acute dilatation of the stomach develops, with excessive thirst and frequent vomiting of stomach and duodenal contents. The stomach tube gives only temporary relief. The patient is restless, anxious and evidently losing ground. Auscultation of the abdomen reveals intestinal metallic gurgling sounds due to paroxysmal waves of peristalsis occurring at frequent intervals. The peristalsis forces the liquid and gaseous contents of the bowel to the point of obstruction and produces much pain. Urinalysis shows albumen, casts and indican in increasing quantities.

No wise surgeon gives purgatives under such circumstances. Enemas of every kind have been tried and failed. The patient's condition is getting desperate, something must be done and that quickly. Often by this time not only the patient but the family as well have become demoralized. The thought of another operation only adds to the confusion. It is in cases of this kind that enterostomy offers the greatest relief.

If circumstances will permit the patient should be gently removed to the operating room where any measure can more conveniently be carried out. However, an enterostomy can be done without moving the patient from the bed. With the judicious use of a local anesthetic and the persuasive words of the tactful surgeon the entire operation may be carried out without producing either pain or fright.

Under the plea of "dressing the wound" a few stitches are removed and the edges of the incision gently separated. When the peritoneum is opened one should not search for the point of obstruction, unless it be easily reached, but content himself by dealing with the first distended coil of intestine that presents itself. The emphasis is upon *distended*, since it is worse than useless to puncture the bowel below the obstruction. When the obstruction is purely mechanical and no sepsis is present more freedom is allowable. Without disturbing the parts unduly a purse-string suture, preferably of chromic gut, is placed into the bowel wall. The needle should be introduced rather deeply. An area a good half inch in diameter is included. By catching the suture at two equi-distant points with forceps and the untied ends between the fingers, sufficient tension can be maintained to serve the double purpose of steadying the parts and reduce the soiling of the field to a minimum.

While the suture is being held the pencil point of a thermocautery is made to slowly burn a hole into the intestine. The cautery is preferable to the knife or scissors for several good reasons; first, a burnt wound does not bleed, while a stab wound into the intestine occasionally severs a small vessel which requires ligating; second, a perforation made by burning tends to contract rather than to get larger, which is an important consideration when dealing with an intestinal fistula; third, the heat seals the various coats of the intestine together so that the edges do not separate or retract; fourth, there is a notable absence of eversion of the mucosa, which is seen in stab and pistol shot wounds of the intestines.

Before the perforation is made the enterostomy tube should be prepared and near at hand so that as the cautery point is withdrawn the tube may be immediately introduced and thus avoid the escape of intestinal contents. The tube is preferably one of fairly soft rubber that will not collapse. It should be smooth and without enlargement of any kind. A tube twice the size of the opening can be easily introduced, since the bowel wall is sufficiently elastic. The disproportion between the size of the tube

and the fistula causes the rim to hug the tube closely, which prevents leaking.

The forceps are now removed from the suture and the ends tied. With a little care the inversion of the edge of the perforation is easily effected. If the condition of the intestinal wall will permit, a second purse-string suture adds to the security and increases the inversion, which favors the subsequent healing of the fistula by bringing a wider margin of serosa to serosa.

Whenever it is possible to do so, the omentum should be drawn about the tube and, if need be, stitched in place by one or two fine plain cat-gut sutures. A splendid plan is to puncture the omentum and pass the distal end of the tube through it. Utilization of the omentum with which to safeguard the intestinal opening, both before and after the tube has been withdrawn, can not be too strongly emphasized.

Formerly the writer stitched the tubing to the intestine in order to secure it in place; but this is a mistake, since the suture from tube to gut is liable to cut out of the intestine and increase the size of the opening. Besides, on subsequently removing the tube the anchor suture disturbs the inversion, greatly interfering with the healing. The tube is best secured by narrow strips of adhesive plaster to the skin.

Unless the abdominal cavity be already shut off from the field of operation by adhesions the open portion of the wound should be filled with fluffy gauze which will protect the peritoneum and promote the formation of adhesions.

When the perforation has been done with the cautery, the edge properly inverted, and the parts surrounded by omentum, the fistula usually heals of itself very promptly. The writer has had fistulae that did not leak a drop, either before or following the removal of the tube. While there is no operation more serviceable than an enterostomy when indicated there can be nothing more annoying than a fecal fistula that will not heal. The technic herein described reaps the benefits of the one and avoids in a large percentage of cases the evil effects of the other.

This method of doing enterostomy can be safely accepted as the standard. Also it may be said that like the singing of the

Southern mocking-bird, one of its chief beauties is the variations to which its technic is susceptible, and that, too, without departing from the principles involved in its standardization.

For instance, the use of the appendix through which to insert a catheter for drainage is only a refined method of doing enterostomy. Under certain circumstances, it is not necessary to use a purse-string or indeed a suture of any kind. Occasionally, after the distended bowel is emptied its walls are so flacid as to allow of an inch or two of the drainage tube being covered by suturing the bowel over it similar to a Witzel gastrostomy. This, however, is not often advisable, especially if the omentum can be made to surround the fistula. In some cases the omentum can not be utilized. Securing the fistulus area to the parietal peritoneum by a continuous suture after the manner of Kocher is not advisable unless a permanent fistula is desired. If it is thought expedient, the bowel may be anchored to the peritoneum with two to four interrupted sutures. Should it not be practical to open the abdomen through the former incision it is easy enough to make an independent incision under local anesthesia. Other variations might be mentioned, but suffice it to say that a standardized technic once understood and approved can be easily adapted to meet the conditions found.

Selected Articles

COLONEL ROOSEVELT'S SPEECH BEFORE THE AMERICAN MEDICAL ASSOCIATION*

In speaking to the doctors, I address a body of men whose profession is honorably distinguished because in practical fashion it sets service as the ideal before those who follow it. Of course a doctor, like everyone else, must earn his own livelihood and make enough money to support his own wife and children, or he will be only a drag on the community; and equally of course in your profession, as in every other profession, there are some sordid creatures who think only of making money. But these men are the exceptions, and there is in your profession a strong public opinion which scorns such a sordid perversion of your great and noble art. You preach and practice the doctrine of service; of service rendered primarily for itself and only secondarily for the money reward.

In the present great national crisis of the world war, it is precisely this doctrine of service upon which we need to lay most stress. Of course service normally means self-sacrifice. But I do not think that you ought to let your minds dwell very much on the sacrifice. The man who does not heartily do his full duty by the nation in this crisis is not fit to be a citizen. He does well, but not extraordinarily well, if he makes whatever sacrifice is necessary. But if he does not make such sacrifice he shows himself to be an abject creature, who should be hunted out of the society of self-respecting freemen. What we need to hold ever before our eyes is not the incidental sacrifice but the high honor and privilege of being permitted to render the service. Every young man of the right temper will eagerly long for the chance to render such service and will count himself thrice fortunate if he wins

*Through the courtesy of Colonel Roosevelt we are enabled to publish this eloquent address, which was delivered at the Hippodrome, June 7, 1917, to a large audience of physicians.

the great prize of securing the chance to render it, no matter what price he may pay in danger and hardship. This is especially true of young doctors, for surgeons are sorely needed for our Allies and for ourselves. England, France, Italy, and perhaps above all, Russia, Servia, Armenia, and Syria, need them. As for our own men, if we do not effectively exert every effort to prevent sickness among and secure camp hygiene for our soldiers, we shall show ourselves guilty of the gravest moral dereliction. Every young doctor should volunteer his services; no man has a right to hold back unless he has a young family with claims so urgent that they can not be disregarded.

Some well-meaning men talk as if their duty would be fully performed if they served when drafted. This is a great error. Service under the draft merely represents the minimum duty which will be accepted by the State. If it lies within your power you should strive to render far more than the minimum service. Many good men of no special aptitude for other than line work will not be able to get the chance to render service until and unless they are drafted. Therefore the drafted man who does his duty stands on a full level of honor with the man who volunteers to do duty. But the man who is not drafted does not stand on a level with his drafted brother unless he eagerly and persistently seeks the opportunity to volunteer wherever he can do useful service. If he is denied this opportunity through no fault of his own, then he is free from all blame; although if he is of the right type he will bitterly regret that he has not been allowed to render the service. But he must be in good faith and earnestly seek the opportunity. The young doctor or surgeon, and the young man who is fitted to render service of any kind under the doctors in the Medical Corps, are badly needed at this moment. They are needed now; this week; today. Therefore let every young doctor, every young man fit to render aid under a doctor, come forward at once and volunteer his services.

This work I ask you to do is of imperative importance, and the need is instant. Meet that need now. Do not wait. Speed is of the first consequence. All of you here, as soon as you get back to your home towns, proceed to arrange the hospital assignments,

and everything of that kind, so that the young fellow just out of college or the medical school will be free to volunteer for immediate service in our army. Let the older men who because of age, or of other disabilities, or for other good reason, can not get into the army, arrange to do the work the young men usually do, and leave the latter free to volunteer for service abroad. This will mean that the men of each class, those able to go and those not able to go, will be doing their full duty. Do it now!

We are in the great war for the sake both of our national honor and vital national interest, and for the sake of humanity and civilization throughout the world. For two years before we most reluctantly went to war, Germany had been engaged in a steady and relentless campaign of murder against American women and children and unarmed men. Germany has struck blows at international right and justice which means that unless she is signally punished the whole movement for international fair dealing and brotherhood will have been put back for centuries. To the conquered countries she has behaved with a systematic and appalling brutality which is literally unparalleled among civilized nations since the close of the hideous religious wars of the seventeenth century. I wish that every American would read Arthur Gleason's just published book, "Our Part in the Great War"; for no American who reads it can fail to feel his blood boil with horror and anger over the fearful cruelties it recounts, and the shameful folly this country showed in not instantly taking action to rebuke those cruelties and in refusing even to prepare to defend itself. No American who reads it, if he has a spark of manhood and of the old American spirit in his soul, can fail to feel his heart harden with the resolute purpose (inasmuch as at last, thank Heaven, we have dared to fight for the right) to do his part in seeing that this nation remains steadfast in the war until it is crowned by complete and overwhelming victory; and let this man feel that his children will turn from him in shame unless he does all that in him lies to aid in bringing this victory.—*International Journal of Surgery*.

Extracts from Home and Foreign Journals

SURGICAL

RESULTS OF OPERATION FOR BREAST TUMORS.

Pilcher's paper is summarized as follows: In the early period in the development of every cancer of the breast it is absolutely curable. If this fact were brought home to every woman, there would not longer be any deaths from cancer of the breast. Even a large and long active surgical experience does not qualify any man to say positively in many cases of chronic cystic mastitis (secondary cytoplasia) whether there is a malignant element present or not. Recognizing the frequency with which the supraclavicular glands are invaded in tumors in the upper quadrants of the breast, it is urged that every advanced case should have the benefit not only of axillary gland dissection, but also removal of the supraclavicular glands as a part of the primary operation. Cases of recurrence, even in which the opposite axilla or other breast becomes involved, are not necessarily fatal.—*The Journal of the American Medical Association*.

SPONTANEOUS RUPTURE OF THE STOMACH.

This accident, at least when it occurs in a healthy stomach without trauma, must be extremely rare. Steinmann, the well known Swiss surgeon who has just reported a case in the *Correspondenz-Blatt für Schweizer Aerzte* for March 10, has been unable to find a duplicate in literature. The victim was a young girl aged 17 years who at her noon meal ate sour kroust and later suffered from gastralgia, vomiting and diarrhea. There was progressive meteorism and at 8.15 p. m. the patient felt a severe pain and told her mother that something had burst within her. She was taken at once to the hospital, where laparotomy was per-

formed after a diagnosis of perforative peritonitis. The peritoneal exudate had an acid odor and much of the sourkrout was found in abundance as far down as the lesser pelvis. The inflated and partly adherent colon was lifted up and a rupture found on the posterior wall of the stomach which measured 7 cm. in length. Not the slightest trace of a previous ulcer was found. The rupture was sutured, the abdominal cavity flushed with saline and a thick drainage tube was inserted between the lesser pelvis and lower angle of the wound. Foul pus escaped through the tube but this condition was soon overcome by the author's continuous air douche. The patient made a complete recovery. It was assumed that rupture occurred as a result of closure of the cardia by the sour krout. The gas generated in the stomach, unable to escape, eventually caused the rent in the wall of the viscus.—*Medical Record*.

SKIN GRAFTING.

In a well illustrated article, in the International Clinics for June, Shipley describes the excellent results he has obtained in the treatment of chronic leg ulcers by the use of skin grafts. He employed the method described by John Staige Davis in the Journal of the American Medical Association, September 19, 1914.

Shipley reports eight cases of the obstinate type of leg ulcer in which complete success was obtained.

He recommends this method for the following:

First—The ease and the simplicity of the procedure.

Second—Its uniform success if the proper precautions are taken in the preparation of the surfaces and the application of the grafts.

Third—The robust surface that is formed by the graft.

Fourth—The fact that the operation can be done without a general anesthetic.

Fifth—The very rapid and remarkable filling up of the base of the ulcer to the level of the surrounding tissues.

The method is not available on an exposed surface like the face, unless the grafts are closely placed, otherwise the resulting surface has a spotted appearance.—*Arthur M. Shipley, M.D.*

BLOOD CHANGE IN GAS POISONING.

The blood in forty-four cases of gas poisoning was studied by Miller. He now says that in cases of gas poisoning in which symptoms persist, there is an increase in the number of lymphocytes, relative and absolute, in the circulating blood. In slight cases this may not be beyond the normal limits or in excess of what may be met with from other causes. In any marked case, however, the change is sufficiently striking to be of some importance in cases in which the medical officer is in doubt as to the reliance to be placed on the statements of men complaining of having been gassed. The blood change is elicited by a differential count of the leukocytes, and if the percentage of lymphocytes approaches that of the polymorphonuclear leukocytes, it indicates that the patient is still suffering from the effects of the gassing; that is, provided there is no other complicating diseases present which might produce a similar change. The cell which is increased is the ordinary small lymphocyte of the blood. There may be in some cases a diminution in the number of polymorphonuclear leukocytes which will, of course, accentuate the sign, but the increase of lymphocytes is an absolute one. Moreover, it appears in cases with a high leukocyte count. The change is one which develops early, probably within a month of the gassing, and continues for a long time; in cases with persistent symptoms, for at least eighteen months. The change appears to be independent of the kind of gas, and it is shown by patients exhibiting many varieties of symptoms. It is not clear what the change is due to, but Miller suggests that it is probable that chronic inflammatory change in respiratory and gastric mucous membranes is at least a factor.—*Journal of the Am. Med. Asso.*

IMMOBILIZATION OF TUBERCULOUS LUNG BY EXTRACTION
OF INTERCOSTAL NERVES.

The *Ugeskrift for Læger* gives a summary, p. 383, of an illustrated article by Warstate in the *Deutsche Zeitschrift für Chirurgie* describing his success in excluding the tuberculous lung

from participation in respiration by extracting a stretch of each intercostal nerve on that side. Attempts have been made to arrest the functioning of half of the diaphragm by severing the phrenic nerve. But the effect of this is restricted to the lower portion of the lung, while tuberculous processes usually are located in the upper portion. The upper portion can be immobilized by paralyzing the thoracic muscles of respiration. He exposes the intercostal nerves from the second to the eleventh, inclusive, his incision being along the margin of the erector spinæ. He cuts each nerve distal from the dorsal root, and then twists the distal end of the nerve out with forceps. He applied this operation to sixteen rabbits and one dog, and when killed weeks or months later the lung was found materially reduced in size and of solid consistency. The abdominal muscles did not seem to feel any effect from the operation, either in the animals or in the two clinical cases in which he has applied it. In his first patient that half of the thorax did not participate at all in inspiration, and in three months was much flatter. The patient's condition had improved notably by the end of six months, the tuberculous process having been unmistakably arrested. There was no cavity in the second patient, and the whole set of symptoms disappeared in the course of a few months.—*The Journal of the American Medical Association*.

ENUCLEATION OF EYE WITH IMPLANTATION OF PATIENT'S FAT INTO THE CAVITY.

John M. Wheeler, M.D., *American Journal of Surgery*. The author recommends that in enucleation all the tissues outside the sclera be saved. The muscles are clamped at their insertions before cutting. After the globe is removed bleeding is stopped by pressure with sponges. A piece of subcutaneous fat is removed from the inner aspect of the thigh and placed in the orbit, the muscles being crossed and sutured over it. Tenon's capsule is then brought together by a purse string suture, and the conjunctiva closed by fine silk interrupted sutures. A shell can be worn

three weeks after the operation. The following advantages are claimed:

1. Good motility of stump and artificial eye.
2. Thin shell can be worn, and this is held in good position as to proper prominence and proper tilt without having to rest on the lower lid.
3. The lachrymal drainage is usually good.
4. The orbital tissues are not required to retain substances foreign to them.
5. There is no danger of sympathetic ophthalmia due to the presence of the fat, and nothing has been introduced which can be broken or extended.—*Pacific Medical Journal*.

MEDICAL

JAUNDICE WITH AN ENLARGED LIVER IN A YOUNG ADULT. (Primary Carcinoma of the Gall-Bladder.)

An example of this rare condition is reported in the International Clinics for June, by McGrae.

The patient was a young man, age thirty years, who entered the hospital because of illness dating back five months. The trouble began with pain in the right side, loss in weight. Jaundice appeared about three weeks after his admission to the hospital. Physical examination showed prominence of the surface veins of the abdomen and fulness in the epigastrium was due to a firm mass with a distinct edge which came within 1 c. m. of the navel in the mid-line. The mass extended to the left beneath the left costal margin opposite the ninth rib. To the right it passed under the right costal margin and in the nipple line is felt below the costal margin on deep inspiration. The mass was smooth and hard and presented no irregularities. The gall-bladder was not felt. As active anti-syphilitic treatment had been tried before his admission to the hospital and the Wassermann test was negative,

syphilis was ruled out. A moderate nucleocytosis was present and the red cells slightly reduced in number.

After considering the various conditions which might account for the tumor mass, loss of weight, jaundice, etc., the diagnosis was correctly made by exclusion. The conditions considered were: Hypertrophic biliary cirrhosis of Hanot; syphilis, portal cirrhosis, abscess, cholangitis, angiocholitis and neoplasm. The latter seemed the most probable diagnosis. This was confirmed by an exploratory operation and later by autopsy.

The majority of the cases of primary carcinoma of the gall-bladder are associated with gall stones, the figures varying from 75 to 100 per cent. The case reported belongs to the exceptions.
—*Thomas McGrae, M.D., F. R. C. P.*

KEROSENE OIL IN DIPHTHERIA.

Dr. T. M. Clayton in the *British Medical Journal*, gives us an account of cases of extremely severe diphtheria, treated by coal oil (Kerosene oil) successfully. These four grave cases of laryngeal diphtheria, ranged in children from 2 to 4 years. Two of these were in such a condition that tracheotomy was out of the question. Kerosene oil was administered internally in doses of 30 minims to all four, thrice successively every 4 hours, then 10 minim doses three or four times daily until normal breathing was established, which occurred in all four cases in 48 hours.

From the first dose breathing became easier, improving with each successive administration until it became tranquil. No untoward action was observed.

No one would ever think of administering kerosene internally, and would at once discard it for its mere taste, but we are pleased to learn from the author that this taste can be disguised by means of compound decoction sarsaparilla. The author is of opinion that this remedy is likely to be of great value in conditions such as spasmodic croup, membranous croup, diphtheria and in many throat affections.

Kerosene oil is admittedly a strong antiseptic and very probably the cure is due to these antiseptic qualities, but whatever the

reason may be, we must give this new method a further trial and research.—*The Practical Medicine*.

THE MECHANISM OF INTESTINAL STASIS IN CHILDREN.

Dr. Fenton B. Turck of New York presented this paper. He reviewed his work, demonstrating the permeability of the intestinal walls to bacteria, and pointed out that in infancy and early childhood there was no barrier to arrest the passage of the intestinal flora since antibodies had not yet been generated as they were not needed. As the body developed, the tissues became less porous to bacteria. The factors leading up to intestinal stasis in childhood were much the same as those responsible for this condition in the adult excepting that the infantile organisms was more susceptible. The various factors involved in the production of stasis in children were a hypersensitiveness which was responsible for an anaphylactic reaction; splanchnic congestion due to various causes, as overfeeding, especially with meat extractives and fatty acids, fatigue, shock, venous stasis and increased permeability of the intestinal wall. Treatment must be directed to the various factors playing a part in the production of these conditions. It consisted, according to the severity of the case and whether it was acute or chronic, in colonic and gastric lavage, intercolonic and intergastric pneumatic gymnastics, demulcents, diet with special attention to the elimination of meat extractives and fatty acids, and the administration of autogenous vaccine made according to the method described by the author in a paper read at a joint meeting of pediatric societies in Boston, November 4, 1916 (See *Medical Record*, December 2, 1916, pp. 1005 and 1006).—*Pediatrics*.

RELATIONSHIP BETWEEN DIABETES AND CANCER.

Albert Robin, the eminent clinician of Paris, states that this subject involves seven distinct problems. If a diabetic has to undergo an operation for cancer he is likely to die of coma. No operation should be performed if patient has acetonuria or if he

is seen to have the double cachexia. No matter how severe the diabetes, an incipient cancer should be removed. In cancer of the breast in a diabetic removal of the former will prolong life, provided that in advance of operation sugar in the urine is largely diminished. Diabetes furnishes a preferred soil for cancer; it both invites it and hastens its course (glycemia is increased as a rule in most cancerous subjects).—*Le Progrès Medical*.

CHIGGERS.

Bassewitz quotes a traveler's description, dated 1820, of the tormenting itching caused by the minute red insects known as "micuims" in Brazil and as "red lice," "chiggers" or "jiggers" elsewhere. Bassewitz knows a man and his mother who are never affected by the chiggers; both have familial cholemia. He has not been able to demonstrate salivary glands in the insects but is confident that they secrete an irritating fluid which induces afflux of lymph wherever they implant their mouth. This the insect sucks; no corpuscles have been found in them after they have been biting a person. He recommends benzin or an alcoholic tincture of Peruvian balsam for local application. This kills them at once and they can be removed without leaving the head embedded in the skin. A tincture of pyrethrum is also useful both for this and to ward them off. Mentholated petrolatum is recommended also. It has the additional advantage of soothing the intense pruritus which is liable to last for some time after the insects are gone. Among the household remedies much used are rubbing with rum or an alcoholic maceration of tobacco leaves. In dogs and other animals the insects are found mainly around the eyes and in the ears. The nervous irritation from them may induce actual mania or fits in the animals. Chiggers may also cause havoc in the poultry yard, the accumulations of larvae under the wings and around the anus suggesting an eruption with scabs. Bassewitz advises burning over the fields affected, as is done to eradicate ticks in Rocky Mountain districts, saying that this might aid at the same time in eradicating certain other causes for cattle ills.—*Journal of the American Medical Association*.

OBSTETRICAL

MYOMA AND PREGNANCY.

Heimo is convinced that the defective involution of the uterus in many cases is due to the presence of a myoma, possibly unsuspected. In one case he discovered a myomatous tumor on the right cornu of the uterus after delivery, but it had entirely disappeared by the ninth day. The hypertrophy, softening and atrophy of a small or medium sized myoma during pregnancy prevent its interfering with delivery. Operative intervention was required in only four myoma cases at the Geneva maternity in a recent eight-year period. These cases are described in detail. The women were all in the thirties, and the disturbances from the myoma were so severe that the uterus was removed notwithstanding the pregnancy of two, four or eight months' standing. In case of doubt as to the myoma, Beuttner rubs the uterus lightly, to induce it to contract. As it contracts, a myomatous tumor is thrown into greater relief, over it, but if the protuberance is caused merely by part of the fetus presenting, the protuberance disappears as the uterus contracts over it. In case of doubt as to an existing pregnancy, when operative intervention is decided, it should be by a laparotomy. If the uterus is to be removed, Heimo advocates the Kelly-Beuttner technic but enucleation may answer all the purposes in some cases. The vaginal route is liable to disagreeable surprises. Only about 20 per cent of all the known myoma cases in his experiences were sterile. When a myoma is discovered in a woman who has been barren for ten or twenty years, we can not ascribe the sterility always to the presence of the myoma. Hofmeier even declares that a myoma favors conception, not directly but because it postpones the menopause. Pinard says that uterine myomas develop as a consequence, not a cause of sterility. They are the punishment for a uterus that has not served its physiologic function. Heimo affirms, on the other hand, that we have unduly exaggerated the part played and the influence exerted by myomas on sterility and pregnancy.—*The Journal of the American Medical Association.*

DELIVERY THROUGH SHELL WOUND.

Saint, Goelinger and Poire record (*Jour. de med. et de chir. prat.*, January 10, 1917) the case of a woman six months pregnant in whom delivery was brought about by a remarkable accident. She lived in a region occupied by the British and constantly bombarded, and was sitting at a window when a shell exploded in the street and wounded her in the lower abdomen. When brought to the hospital it was found that the belly was very painful and palpation was so difficult that it was impossible to determine the position of the fetus. An aperture of entry was found a little below and to the left of the umbilicus, and that of exit at a distance of nine centimeters from the left crural arch. On palpation it was found that the abdominal muscles were completely divided and that only a bridge of skin was left between the two apertures. The patient was bleeding abundantly through the vagina. The bridge of skin was cut through and laparotomy was performed. On the fundus there was found a wound of about five centimetres through which was seen the lumbar region of a fetus showing a small wound. The wound was enlarged, when the fetus was easily delivered; the pelvis, which was full of meconium and amniotic fluid, was cleaned, and the operation was completed by careful haemostasis and suture of the uterus.

The case ran a normal course and the mother made a rapid recovery. As for the child, which was left unattended to, as it was believed to be dead, it soon began to cry and to show itself very much alive. It weighed 950 grams; but as no incubator was available it died in fifteen hours. The British Medical Journal, December 4, 1915, stated that Dr. Henrot had not long before given to the Paris Academie de Medecine an account of the bombardment of the hospital at Rheims. The maternity patients were by way of precaution moved to the cellars; one of the women was delivered by the action of a shell, which tore open the abdomen and uterus; the child had simply to be extracted.—*Buffalo Medical Journal*.

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M.D., corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

MEDICAL MEN FOR THE ARMY.

What is the matter with the medical profession of this country that its members appear backward in responding to the appeal of the government to fill the urgent needs of an increased army and navy for men to serve in the medical department? Why this apathy? Why this holding back when it is so clearly patent that medical men are sorely needed in order that our government can do its part in this great war? It may be that it is from failure to realize the needs that are so clearly apparent. It may be that many of us assume that the war is nearly at an end and therefore the needs are exaggerated. It may be that individual selfishness has taken the place of patriotism. Whatever be the cause it is a well known fact that the medical profession is behind all other classes in enlistment, and the number required for the medical reserve from which to make a selective draft is woefully over and above the number enrolled; 20,000 are needed, of which only 4,000 are enrolled. Every physician in this country between the ages of 25 and 55 should without delay offer his services to the government. If accepted he should be ready to serve wherever assigned. Patriotism is not true patriotism without some sacrifice. If the men of whom our great army and navy are composed are ready to give up their lives if necessary for their country surely members of our noble profession should be ready to give up their home comforts and emoluments to pro-

tect these men in war wounds and disease. From an estimate of the *American Medical Asso. Journal* we learn that the number of graduates from the various medical colleges in this country in the last six years—1912-1917 inclusive, there were graduated 22,478. Leaving out of this number the women graduates and the deaths among all the graduates in the time specified there would remain the goodly number of 20,000 young doctors between the ages of 25 and 35 from which a selective draft could be made. There should be no difficulty in securing the needed number for the medical reserve if conscription were made up from this number alone. In this connection we take pleasure in presenting below two circular letters prepared by the Committee of National Defense, medical section, issued to the profession of the State of North Carolina. These circulars show an activity which is highly commendable and deserving of imitation by all other states. Let every man do his duty should be the slogan of the medical profession in this crisis:

MY DEAR DOCTOR:

I am writing you as chairman of our State Committee, believing that your committee might be interested in a position taken by the North Carolina State Committee on National Defense, Medical Section. In a recent meeting we passed the following resolution:

"WHEREAS, The justice, wisdom, and effectiveness of the selective draft have been recognized by Congress in raising a strong army from our civilian population; and,

"WHEREAS, The advantages of the selective draft apply with equal force to securing adequate medical service for the army; therefore, be it

"*Resolved*, That we, the North Carolina State Committee on National Defense, Medical Section, recommend that the said board use its influence with Congress in having the principles of the selective draft adopted for securing an adequate medical service for the army."

The resolution speaks for itself. The objects we had in mind in adopting this resolution were two: (1) An adequate medical

service; (2) to relieve physicians of the disagreeable responsibility of deciding where their professional services are most needed under the circumstances. It is embarrassing to certain physicians whom everybody recognizes are most needed at home to be required to make that decision themselves; moreover, such physicians are ready to go to the front if the Government decides that they are needed there.

We would be very glad if your State committee could agree with us in the position that we have taken in this all important matter. If your committee should agree with us, we would appreciate your sending us a copy of the resolution which you adopt and transmit to Dr. Franklin Martin.

Very respectfully yours,

J. W. LONG, M.D.,

Chairman State Committee on National Defense, Medical Section.

MY DEAR DOCTOR:

In addition allow me to add this personal word. You know as well as I that with all the good work done by the State Committees of National Defense, Medical Section, we have not succeeded in getting commissions placed in the hands of one-fourth of the number of physicians that will be needed for the war. Also, that of the 8,000 physicians who have been commissioned, only about 3,000 have accepted their commission. To not accept a commission is to make it as ineffective as though it had not been issued.

Dr. J. C. Bloodgood, Chairman of the Committee on Medical Preparedness, Southern Medical Association, with whom I have been in conference touching the matter, advises and urges that each State Chairman of the Committees of National Defense, Medical Section, call his committee together and ask them to endorse the movement of the selective draft for physicians. He believes, as I do, that, if a majority of the State Committees will adopt the North Carolina resolution, or something similar, and it should meet the approval of the Surgeons General of the Army, Navy and Public Health Service, our General Medical Board of the Council of National Defense would present the matter before Congress and urge its adoption. It seems clear that this is the

only solution of the problem of an adequate supply of physicians for the service.

Remember that: "The King's business requireth haste."

Requesting that you kindly advise me of your action in the matter and with personal regards, I beg to remain,

Sincerely yours,

J. W. LONG, M.D.,

Major, Medical Reserve Corps, U. S. A., Chairman State Committee, National Defense.

DO YOU KNOW THAT

Keeping health is a part of doing "your bit?"

Universal public health service is the duty of the Nation?

Much valuable food material is diverted in the manufacture of alcoholic beverages?

The only good fly is the dead one?

Good health is the foundation of personal usefulness either in peace or in war?

He who is too busy to care for his health may have to take time to cure disease?

RESOLUTION OF THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER.

Washington, D. C., January 28, 1917—A letter recently received by Director Sam L. Rogers of the Bureau of the Census, Department of Commerce, from Mr. Curtis E. Lakeman, executive secretary of the American Society for the Control of Cancer, conveys the information that the National Council of that society, at its meeting at the Harvard Club, New York City, on June 4, 1917, unanimously adopted the following resolution:

Resolved, That the American Society for the Control of Cancer strongly commends the action of the U. S. Bureau of the Census in publishing its notable report on the mortality from cancer in the U. S. Registration Area in 1914, and records its apprecia-

tion of the courteous coöperation of the Director of the Census and all the members of his staff who contributed to the compilation of this unique volume, which represents an unparalleled contribution to the statistical study of malignant disease, and has already furnished the basis for many promising special investigations."

Editor Nashville Journal of Medicine and Surgery, Nashville.

DEAR SIR — I am leaving for France as neurologist in the French service. Expect to return in October, 1918. Kindly send my journal to Dr. E. G. Mitchell, 15 7th Street, N. E., Washington, D. C. Please announce my departure and that patients and communications are to be referred to Dr. Mitchell until my return.

Yours faithfully,

TOM A. WILLIAMS.

CHILDREN IN WAR TIME.

Third Article: How Canada Takes Care of Soldiers' Children.

Washington, June 30—How Canada provides for the wives and children of her enlisted men is described in a report by Mr. S. Herbert Wolfe of New York, prepared at the request of the Secretary of Labor and just published by the Children's Bureau of the U. S. Department of Labor.

In presenting the report, Miss Lathrop, Chief of the Children's Bureau, says:

"In the fifty years since the Civil War, legislation affecting the family and its economic status has shown marked growth. Mothers' pension laws and minimum-wage laws are recognized examples, and it is acknowledged that their result has not been to pauperize but distinctly to improve the power of the family to protect itself. In view of this tendency it is to be expected that a system of compensation for soldiers and sailors can be developed whereby the Government will make possible for their children

the home life and parental care which are the common need of every child."

The report points out that in Canada two notable elements have been added to the government provision for soldiers and their families: First, insurance on the lives of soldiers is carried by various municipalities, and, second, the Dominion has undertaken as a part of its military system the reëducation, in a suitable occupation, of the disabled soldier so that he can assume again, in whole or in part, the care of his family.

The Canadian compensation for the soldier and his family includes not only \$33 of monthly pay for the private in active service, but a separation allowance to his dependents of \$20 a month from the Dominion Government and further assistance in special cases from the Canadian Patriotic Fund.

For example, the wife of a private soldier with three children between the ages of 10 and 15 may receive either \$15 or \$20 from the assigned pay of her husband, \$20 separation allowance, and \$25 from the Canadian Patriotic Fund, or in all \$60 or \$65 a month.

If her husband is killed, she will receive \$40 a month for herself, and an additional \$6 a month for each of her children until her boys are 16 years of age and her girls are 17 years of age. In addition, if she lives in Toronto or one of a number of other cities, she will receive life insurance. This will be paid to her in monthly installments unless she shows that she needs the entire amount at once to pay off a mortgage or to make a start in business.

If her husband is disabled, she will receive a special maintenance allowance while he is having medical treatment and learning a new occupation, and when he is finally discharged, if his physical disability continues, a pension will be paid according to the extent of his disability and the number of his children under 16 or 17 years of age.

Mr. Wolfe is an actuary of recognized authority and he has analyzed especially the municipal provision for life insurance by which certain Canadian cities have supplemented the pensions provided by the Dominion for dependents of deceased soldiers.

In Toronto, the municipality has not only purchased \$10,000,000 worth of insurance from private companies, but it is itself carrying more than \$32,000,000 worth of insurance. A municipal insurance bureau has been organized and \$2,000 worth of bonds have been issued of which the principal and interest are a charge upon the general taxpayers of the city. Every officer and enlisted man residing within the city limits of Toronto who volunteers for overseas service has from the date of his enlistment been protected by a life insurance policy of \$1,000, the protection running from the time of his enlistment to his death or six months after his discharge or resignation.

The report refers also to the fact that each of the European countries makes government provision for the families of private soldiers and sailors. In Great Britain, France and Germany the amount of the governmental separation allowance depends upon the size of the family which must be supported.

CHILDREN'S PLAY—A PATRIOTIC CALL.

Washington, June 30, 1917—Public provision for recreation is not a luxury to be cut off but a necessity to be conserved. Miss Julia C. Lathrop, Chief of the Children's Bureau of the U. S. Department of Labor, in discussing the report on Facilities for Children's Play in the District of Columbia, which has just been issued by the Bureau, said today:

"An English authority has lately pointed out the demoralization to boys and girls caused by the breaking down of clubs and the withdrawal to the army of recreation leaders, and he has traced much of the increase in juvenile delinquency in England to the chaos in recreation activities which has prevailed since the war.

"This is a good time to remind ourselves that the continuance and development of all types of innocent and healthful recreation in every community offer a call to patriotic service for many who can not go to the front. The strain and anxiety which are certain to grow in this country for an indefinite period ahead of

us need to be counterbalanced by greater community effort to provide opportunity for wholesome play."

The report on children's play in Washington describes the various sections of the city and the extent of the playgrounds and athletic fields provided by the District Government, by the public schools, and in connection with the Federal parks. It includes an analysis of distances and population in relation to play facilities and makes recommendations for the further development of recreation in Washington.

MINERS' CONSUMPTION.

A recent investigation of the causes and prevalence of miners' consumption among the metal miners in Southwestern Missouri forms the subject of Public Health Bulletin No. 85, issued by the U. S. Public Health Service.

Miners' consumption consists essentially of a mechanical injury to the lungs due to the prolonged inhalation of hard rock dust. It has been recognized as being prevalent in some American mining districts, particularly in the Joplin zinc and lead districts. It was to determine its actual prevalence, and its relationship to pulmonary tuberculosis that the investigation was undertaken.

In the Joplin district certain mines are known as "sheet-ground" mines, in which the ore is found imbedded in an exceedingly hard flint. In drilling and other mining operations this flint rock is finely pulverized. The minute rock dust particles enter the lungs, in the process of natural breathing, and by their irritating action cause the formation of fibrous, or scar-like, tissue. The effect of this is to lessen the lungs' ability to expand and contract, with the result that the victim first notices that he is becoming short winded. With continued exposure to this silica containing dust, the difficulty of breathing increases, until the miner is no longer able to perform active physical labor. It was found also that men with dust-injured lungs were especially liable to develop tuberculosis, the dust irritation lessening the ordinary resisting powers of the lungs. While miners' consumption is not in itself infectious or contagious, it predisposes to tuberculosis.

The greater the amount of rock dust injury the greater the liability to tuberculosis; the far advanced cases of miners' consumption practically all become tuberculous before their death.

Under an entirely voluntary system 720 miners presented themselves for physical examination, of whom 433 were found to have had their lungs injured by the inhalation of rock dust; of these 103 were also tuberculous, the amount of tuberculosis infection being greatest among the advanced cases of the rock dust disease.

Five years steady work with exposure to flint dust is fairly certain to find the miner in at least the first stages of miners' consumption. If the miner continues his work after being affected, death usually results within ten years from the time that exposure to flint dust commenced. Poor housing conditions were found to be prevalent and to add to the liability of tuberculosis infection. Apparently tuberculosis is now occurring at an earlier stage of miners' consumption than was formerly the case. The report lays emphasis on the necessity of preventing the spread of tuberculosis through these cases, especially among miners' children. The fact that miners' consumption is a forerunner of tuberculosis necessitates that it be treated with the same hygienic precautions as is the latter disease.

The report concludes that aside from the hygienic supervision of underground working places, the education of the miner against the spread of infection and supervision of miners' children, especially those of consumptive parents, are matters of vital importance.

The National Committee for Mental Hygiene has created a sub-committee on furnishing hospital units for nervous and mental disorders to the United States Government, the project having been approved by Surgeon General W. C. Gorgas of the U. S. Army.

This subcommittee, of which Dr. Pearse Bailey of New York is chairman, is authorized to secure the services of alienists and neurologists to be commissioned in the Officers' Reserve Corps,

Medical Section, and to serve in the neuro-psychiatric units which are to be attached to the base and other hospitals of the military services of the United States. Further information will be given, and application forms sent to physicians qualified in this branch of medicine, on application by letter or in person to The National Committee for Mental Hygiene, 50 Union Square, New York City.

As leading article of this issue we present a valuable paper by Dr. J. W. Long of Greensboro, N. C., which appeared in the March 17th issue of the *Journal of the American Medical Association*. We regret that we failed to secure the cuts which illustrated the original publication, but the text is so clear as really not to require illustration.

Reviews and Book Notices

Physical Exercises for Invalids and Convalescents—By Edward H. Ochsner, B.S., M.D., F. A. C. S., President Illinois State Charities Commission, Attending Surgeon Augustana Hospital, Chicago. Illustrated. St. Louis. C. V. Mosby Company, 1917.

This little handbook should prove of practical use to the practitioner in furnishing a guide to the patient needing it to a course of exercises designed to overcome muscular deficiencies occasioned by various diseases. The little work is copiously illustrated throughout by diagrams with clear and concise text showing the various movements necessary for development. Every practitioner should have this guide, as by means of it he can provide his patient with a full set of instructions for useful exercises.

Progressive Medicine—A Quarterly Digest—Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia. Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. June 1, 1917. Owners and Publishers, Lea & Febiger, Philadelphia, New York.

We acknowledge with thanks to the obliging publishers the receipt of this number of the well known quarterly publication. This number is full of attractive and instructive matter and represents the last word in the advance of the subjects treated of. The contributors to this number are well known authorities upon the subjects to which they have been assigned and it is conceded that these subjects are brought well to date. The physician who desires to keep in the van guard should certainly become a subscriber to this great serial. The contents with authors are as follows: Hernia, by Wm. B. Coley, M.D.; Surgery of the Abdomen Exclusive of Hernia, by John C. A. Gerster, M.D.; Gynecology, by John G. Clark, M.D.; Diseases of the Blood, Diathetic and Metabolic Diseases, Diseases of the Thyroid Gland, Spleen and Nutrition, and the Lymphatic System, by Alfred Stengel, M.D.; Ophthalmology, by Edward Jackson, M.D.; Index.

Roentgen Technic (Diagnostic)—By Norman C. Prince, M.D., Attending Roentgenologist to the Omaha Free Dental Dispensary for Children; Roentgenologist to the Douglas County Hospital, Bishop Clarkson Memorial Hospital, Swedish Immanuel Hospital, St. Joseph Hospital and Ford Hospital, Omaha, Neb. With Seventy-one Original Illustrations. St. Louis. C. V. Mosby Company, 1917.

This small volume should prove of the greatest value to every physician who does any work with the X-ray apparatus. The author evidently has had a very extensive experience with this branch of diagnostic work and is well fitted to point out the way to everyone interested in this important aid to diagnosis. The work is freely illustrated throughout and the text of the work is clear and concise. It is essentially a guide book for the use of the Roentgen ray apparatus in accomplishing diagnosis and as such it will prove practically useful to every one needing such aid. We have examined the work very closely and can conscientiously recommend it to the profession.

Publisher's Department

ARE YOU SEEKING A RELIABLE TONIC?

Conservative medical men are neither asked nor expected to accept the opinions or conclusions of anyone else concerning the value of Gray's Glycerine Tonic Comp. The only request of the manufacturers is that the physician who is seeking a tonic, a dependable means of restoring the activity of the bodily functions, will give this remedy a fair and reasonable trial. To his conclusions as to the results obtained—his judgment as to the superiority of this remedy as a means of overcoming debility, inanition and malnutrition—the decision as to its use in the treatment of debilitated conditions is cheerfully left. Knowledge of what careful, pains-taking physicians, however, are doing with Gray's Glycerine Tonic Comp. whenever a tonic is indicated, leaves no doubt of what that judgment will be, for it has been shown beyond all possible question that this efficient therapeutic agent has no superior in its field of use.

If you have some troublesome case in which you would like to try "Gray's"—write today to the Purdue Frederick Company, 135 Christopher St., New York City.

"*Robinson's Lime Juice and Pepsin*" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See advertisement in this issue.)

More than thirty years ago a prominent physician of St. Paul made the following statement, which has since been corroborated by the clinical experience of thousands of physicians:

"For the indefinite aches and pains of nervous patients Tongaline is superior to any other anodyne. For nervous headache or muscular elimination it is almost a specific."

DISCRIMINATION IN THE USE OF OPIATES.

Some pains are so acute and unresponsive to the simpler anodynes that recourse to an opiate must be had. Most physicians recognize the need of careful choice in the administration of opium preparations, the desire to guard against disturbing the normal function as far as possible and, what is of just as much importance, avoiding the formation of a habit.

In PAPHNE (Battle) the physician will find an opiate of the highest worth and one that will subject the patient to the least harm. It is a purified product of opium.

WHEN THE TISSUES NEED NOURISHMENT.

For chronic anemic conditions due to disordered metabolism, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) shows its marked power to supply nourishment to the tissues.

The advantage Cord. Ext. Ol. Morrhuæ Comp. (Hagee) possesses over the ordinary cod liver oil products is based upon its palatability and ease of assimilation. At a result it may be given for long periods without causing gastric disturbances. Although agreeable, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) possesses the full nutritive and therapeutic qualities of the plain oil.

TAKING UP THE SLACK.

Taking up the nervous slack after an alcoholic debauch is one of the prime purposes of PASADYNE (Daniel). In the extreme nervousness and sleeplessness consequent upon alcoholic saturation of the brain PASADYNE (Daniel) is of the utmost value, and is much resorted to by practical men who handle this class of cases. The sleep secured is refreshing and enables the poor deluded alcoholic to get a grip on himself once again.

A sample bottle of PASADYNE may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Ga.

IN PRURITUS.

Even in severe forms of genital, anal, diabetic, eczematous itching, K-Y Lubricating Jelly in a great majority of cases, will bring relief, or at least grateful alleviation.

To anoint the skin in these conditions, K-Y Lubricating Jelly is not only effective, but convenient and economical, since it can be used without staining or soiling the bed clothes or the patient's linen. If the part is washed before each application, the best results are obtained.

In Neuritis, is the hot water bottle the best anodyne? Palliation, by means of externally applied heat, is just as popular today as it was in Hippocrates' time.

The hot bath and the hot water bottle are wonderful comforters. But who can be continuously in the bathtub, or who can be forever carrying a hot water bottle? And how all too soon does the most faithful hot water bottle lose its odor and its temperature!

There is no simple adjunct in this category more simple and more genuinely effective than application by the patient himself, is possible along the course of the affected nerve, with K-Y ANALGESIC (methyl-salicylate, camphor and menthol, combined in a non-greasy, water-soluble base.)

K-Y ANALGESIC has the obvious advantage over the hot water bottle in that "it stays put" for a much greater period of time. Nor is there the possible danger of a hot water bottle burn—a factor especially to be thought of where the neuritis patient is weak and infirm.

NASHVILLE JOURNAL

— OF —

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W. T. BRIGGS, B.A., M.D., Associate Editor.

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AUGUST, 1917.

No. 8

Original Communications

THE DIAGNOSIS OF URETERAL CALCULI — A PLEA FOR THE USE OF THE WAX-TIPPED CATHETER.

BY HOWARD S. JECK, PH. B., M.D.

Attending Cystoscopist, St. Johns Hospital, Brooklyn, and Surgeon to the Cornell Clinic, New York.

While the symptoms of stone in the ureter are oftentimes so typical as to permit of an almost positive diagnosis, still no surgeon feels justified in instituting a radical procedure for its removal until more definite evidence of the presence of stone is obtained. To this end, we still resort to the X-ray as our one most valuable adjunct, but its failure to show the presence of calculi at times and the frequent mistakes which result in the interpretation of radiographs where a stone is actually present, make an additional diagnostic measure not only very welcome but in some instances an absolute necessity.

Pure uric acid calculi or very small calculi of any composition may be missed entirely by the most skillful of radiographers. Fortunately the former, without an admixture of oxalates or phosphates are very rare, while minute calculi do not tax our diagnos-

tic skill, because they are likely to be passed with the consequent disappearance of symptoms.

It is my purpose in this paper to briefly set forth the advantages of the wax-tipped ureteral bougie or catheter when used in those instances when the symptoms clearly point to ureteral calculus, and where the X-ray either leaves one in doubt or else fails entirely to throw a shadow.

Kelly of Johns Hopkins has used wax-tipped bougies for several years with marked success. But his method of direct cystoscopy limits this adaptability to women alone. And while many urologists employ the wax-tipped catheter with more or less success, still there is somehow the prevailing impression that it is almost worthless as a diagnostic measure. This may be, in part, due to "accidental scratches", brought about by improperly introducing the wax-tip into the bladder and ureter.

During the past eighteen months I have seen at least eight cases of ureteral calculus where the diagnosis was confirmed by the wax-tipped catheter. I shall detail the most striking case of this series, since to me it seems to speak volumes in favor of this means of diagnosis.

Dr. B. S. Barringer, with whom I am associated, had the kindness to call my attention to Mrs. J. F. C., aged 40, who complained of attacks of renal colic. She had suffered her last attack one week before coming to our office. So plainly did the symptoms point to stone in the urinary tract that Dr. Barringer had her promptly X-rayed and obtained the following report:

"Directly in line with the left ureter there is a clean-cut, well-defined shadow which lies just outside the bladder. The size, shape and position of this shadow is strongly significant of a calculus lying in the ureter close to the bladder. There is a possibility of its being outside the ureter, but its appearance is in favor of its being within the ureter. I believe it is of such size and shape that there is a great probability of its passing into the bladder."

Upon receiving this report, the patient was promptly cystoscoped. The bladder appeared to be normal and a saturated solution of indigo-carmin injected intravenously showed up promptly

and strong from both ureters. A wax-tipped catheter passed into the left ureter received a distinct scratch, which Dr. E. L. Keyes, Jr., Dr. Barringer and I all agreed was caused by a stone and was not accidental. A week later a few "bites" were taken in the left ureteral orifice in order to enlarge it, by means of the Burerger operating forceps.

Soon thereafter the patient had two attacks of ureteral colic, and a month later she was again X-rayed, with the following findings:

"There is a clear-cut, well defined shadow near the lower end of the left ureter and the long axis corresponds with the axis of the ureter. When the plates are compared with those made at the original examination, the shadow is shown to be in the same position as previously, and in spite of the ureteral colic, there is no evidence of its having moved."

Another wax-tipped catheter was passed after receiving the above report and another typical scratch was obtained.

At this time the left ureteral mouth was incised by the Buerger operating scissors and a 14F bougie passed into the ureter. Immediately following this dilatation, the patient had several severe attacks of colic and returned in about three weeks for another examination. For the third time a wax-tipped catheter was passed, and for the first time *no scratch was obtained*. The patient was again radiographed at once and the following findings were reported:

"The shadow, which was distinctly shown in the previous plates in the region of the lower end of the left ureter is absent on these plates. Therefore I feel justified in stating with certainty that the calculus has passed out of the urinary tract."

The urine analysis at this time showed a faint trace of albumen, no sugar, a very few red blood cells, and no pus.

Nearly six months have now elapsed since the patient's last attack of ureteral colic. There have likewise been no other symptoms. And while no stone was ever noticed in her urine, still we think it is only fair to conclude that from her typical symptoms, X-ray and scratches, which coincided every time with the X-ray

findings, there was a stone beyond the shadow of a doubt, and that it probably passed at her last attack of ureteral colic.

Converts to the wax-tip method are not easily won. To me it seems that the secret of possessing confidence in the method lies in one's assurance that he employs a technique whereby the catheter is not scratched accidentally. Such assurance will not be forthcoming if one introduces the cystoscope in the ordinary way and then attempts to pass the catheter. For it is almost impossible to do this without getting an accidental scratch. My way is to feed the wax-tipped catheter *backwards* into the cystoscope with the telescope in place until the wax-tip projects two or three inches beyond the end of the cystoscope. The latter is then introduced in the ordinary manner but with greater care than usual, as the use of the obturator is precluded and hence the introduction is made much more difficult, especially in the male. Indeed, in some instances I have found it quite impossible to introduce the ordinary 24F cystoscope without the obturator. In such cases, however, I have never failed to introduce the 18F single catheterizing cystoscope and have now adopted the plan of trying the latter first, provided the condition of the bladder is such that the limited scope of the smaller instrument will not be a detriment in finding and catheterizing the suspected ureter.

Extracts from Home and Foreign Journals

SURGICAL

INJURIES TO PANCREAS.

A few cases have been observed by Young and Colson in which extreme abdominal distension followed kidney operations. In one of them it was found necessary to perform an enterostomy for the relief of the obstruction, following which the patient made an uninterrupted recovery. The remaining cases of uncomplicated distension yielded rapidly to the usual simple methods. The two cases in which the pancreas had suffered injury are given in detail on account of their rarity and interest. In summary they are: Case 1. Renal calculus. Right nephrotomy. Bleeding from aberrant vessel, stopped by blind clamping and pressure. Postoperative intestinal obstruction. Enterostomy. Death. Necropsy: Pancreatitis, fat necrosis. Case 2. Right renal Calculus. Operation: kidney very adherent at upper pole; pyelotomy. Postoperative intestinal obstruction, requiring enterostomy. Development of glycosuria. R: Pancreatin. Slow convalescence and cure. Another case was an example of severe distension leading to intestinal obstruction which is not infrequently seen after right-sided renal operation. However, in this case there was no demonstrable injury to the pancreas either at the time of the enterostomy operation or in the subsequent postoperative course. Case 3. Nephrectomy for large hypernephroma. Difficult operation on account of hemorrhage. Postoperative nausea, vomiting and distension. Intestinal obstruction requiring enterostomy on fifth day. Recovery.

The authors point out that injury to the pancreas can best be avoided by an adequate incision for the exposure of the kidney and careful ligation of all structures divided in freeing the upper pole; and the probability of the presence of anomalous vessels must be kept in mind and care taken to ligate them securely. In-

jury to the pancreas should be suspected following operation on the right kidney in the presence of extreme abdominal distension and rapid prostration. Rapid enterostomy offers a chance of preserving life by relief of the intestinal obstruction, but if the injury is extensive enough to cause widespread extravasation of pancreatic secretion the condition is hopeless. Traumatism to intestine by retractors, clamps or gauze packs may also cause intestinal distension or even obstruction. Care in hemostasis and good exposure without violent retraction and traumatism is of prime importance in renal surgery.—*Jour. of the Am. Med. Asso.*

RADIOTHERAPY PLUS OPERATION IN TREATMENT OF CANCER.

Nogier says he has been appalled at the histologic findings of cancer cells scattered through the adjoining tissues after apparently complete excision of cancers. Particularly in the breast, improved technic has revealed cells sown through the tissue far back of the primary tumor. They are not seen nor felt, and lie latent till after the operation. This arouses them, and we have recurrence of the cancer. For this and other reasons he advocates broad and intensive radiotherapy before the operation, pre-operative instead of postoperative Roentgen or radium exposures. This he insists will prove successful beyond anything yet realized to date. Working with Regaud, he has conclusively demonstrated, he reiterates, that it is possible to give enormous doses of filtered Roentgen rays, leaving the skin intact. They expose the cancer first, then the adjoining regions, and especially the lymph glands which are ordinarily invaded. The operation should be as early as possible, removing all the microscopically evident malignant tissue. The scattered cancer cells lose all power for reproduction under the exposures, and if any embolism occurs during the following operation the embolus is sterile and metastasis is not entailed. The cells in the depth having lost their power of reproduction, die off sooner or later and are absorbed. This absorption of cancer cells serves as an immunizing process. All the evidence, therefore, he concludes, is overwhelmingly in favor of ra-

diatherapy followed by excision as the logical treatment for cancer.—*The Jour. of the Amer. Med. Asso.*

NON-VENEREAL INFECTION OF THE PROSTATE.

Dr. Geo. Knowles Swinburne asserts that non-venereal prostatitis is quite common, and states that he has seen a large number of men who have never suffered previously from gonorrhea. He points, however, to another much more numerous class of chronic prostatitis which followed an attack of gonorrhea, but in which the gonococci have disappeared and have become replaced by other micro-organisms as, e. g., the colon bacillus, the staphylococcus and, last, but not least, the streptococcus which will so often be found the most rebellious to treatment. As these germs reach the prostate probably through the blood stream, it is easy to explain why they might follow a gonorrheal prostatitis after that disease had prepared a weakened organ for their reception. The writer believes that in no small number of these cases those germs had already found a lodgment in that organ before a gonorrheal attack, remaining in abeyance during that attack and returning after the violence of the gonorrheal attack had subsided.—*Medical Critic and Guide.*

NAIL PUNCTURE WOUNDS OF THE FOOT.

W. Irving, in a series of 100 cases of this injury treated during 1916 at Norton Company Hospital, Worcester, Mass., observed excellent results from the method recommended by Dr. W. G. Hudson of the DuPont Company. The technic is as follows: The foot is thoroughly cleansed with very hot water and soap, dried, and an area about two inches square around the puncture wound is thoroughly washed with alcohol. The sole of the foot is then painted over with commercial gasoline, and after this has evaporated one or two coats of tincture of iodine are applied in and around the wound. A sterile probe is gently passed to the full depth of the wound, and after it fills the entire tract the needle

of a hypodermic, filled with 10 cc. of tincture of iodine, is gently inserted, following the probe as a guide and hugging it closely, down to the bottom of the wound. The iodine is now injected very slowly and allowed to run out along the probe until the operator feels certain that the entire wound tract has been thoroughly washed out, the probe and needle being then withdrawn. A dry sterile dressing is then applied. If the puncture wound is very deep the man is instructed not to work for the remainder of the day, but many resumed work at once. Patients are advised to return in twenty-four hours, even though they are having no trouble. According to Clark's experience, nail puncture wounds of the sole of the foot, when caused by clean nails projecting from a board, as occurring in the building trade and general construction, seldom become infected if properly treated. Tetanus does not develop except possibly in very rare instances.—*International Journal of Surgery*.

ETHER-CHLOROFORM MIXTURES.

W. J. McCardie (*Brit. Med. Jour.*) April 21, experimented with various mixtures to avoid the irritating effects of ether, soldiers being especially to be considered on account of exposure resulting in pharyngitis, and excessive smoking; and, on the other hand, the depressing effects of chloroform. The mixtures used varied from four parts of ether to one of chloroform up to 32 of ether to 1 of chloroform (Note the influence of the apothecary's system) and he found the happy mean to be 16 of ether to 1 of chloroform. He gives 1-6 gr. (1 c.g.) of morphine and 1-100 (about 2-3 m.g.) of atropine before the general anesthetic.—*Buffalo Medical Journal*.

THE CARREL METHOD OF WOUND STERILIZATION.

William O'Neil Sherman (*Surg. Gynec. and Obstet.*, March, 1917), presents the following summary of his views on the Carrel method: 1. Infection can be aborted if the treatment is begun

within the first twenty-four hours. 2. Suppuration, when well established, can be controlled if the focus can be reached. 3. The success of the treatment is dependent upon the perfection of the Carrel technic and the acceptance of all the details. 4. The effect of Dakin's solution is entirely local; there being no danger of toxemia from absorption, regardless of the amount used. 5. Carrel's technic, using Dakin's solution, is a specific against infection of wounds. 6. Deaver's dictum: "He who drains well, does surgery well," must be revised to "He who does Carrel well, does surgery well."—*International Journal of Surgery*.

APPENDICITIS VERSUS ECTOPIC GESTATION.

Appendicitis.

1. No signs or symptoms of pregnancy.
2. Pain, nausea, vomiting and fever.
3. Tenderness and rigidity high up.
4. Leucocytosis usual, and increases from hour to hour.
5. Patient flushed and excited. At the very beginning there may have been a little dizziness.
6. Uterus and adnexa normal.
7. Feel a tumor high up in the pelvis.
8. No uterine symptoms.
9. Abderhalden test usually negative.

Ectopic Gestation.

1. Present.
2. Pain worse, vomiting less, fever absent or less.
3. Tenderness and rigidity much less and low down.
4. Leucocytosis equivocal. The blood count shows increase of the polynuclears and mononuclears and the basophiles with the signs of secondary anemia. Low hemoglobin.
5. Pale and faint or apathetic.
6. The characteristic findings.
7. Tumor low in the pelvis.
8. Menstruation atypical and discharge of decidua.
9. Abderhalden test usually positive.—*Medical Review of Reviews*.

MEDICAL

ABORTIVE TREATMENT OF TYPHOID FEVER.

Maute of Morocco writes on this subject, and first states that at present we have vaccines to prevent the disease, but as yet no real abortive remedy. He believes, however, that we are to have one in the intravenous injection of certain vaccines. By subcutaneous injections alone the finds are conflicting, while of seven men who have used the intravenous route all are agreed as to the benefits obtained—in fact, the conclusions are absolutely in harmony. The only American mentioned in this connection is Frederic Gay. However, to offset the striking abortion of the disease in certain cases is the violent general reaction which is in contrast with the slow course of the disease proper, and may end in collapse and death. In other words, the collateral results kill the idea of the treatment. Is this reaction controllable? Much or all depends on the dose and how can one so dose a vaccine as to make it safe? There is hardly any margin between a therapeutic and a toxic dose. If the amount injected is too small we get neither action nor reaction. There is clearly a marked personal equation. And how are we to be sure that this curative action is truly specific? A specific action need not be instantaneous—in fact, we know that more or less delay may be inevitable in known specific medication. The sudden, violent reaction is rather anaphylactoid. The author has therefore sought to use some relatively harmless animal protein, and selected a nontoxic saprophyte which he describes accurately but does not identify. He made an emulsion, which, tested in animals by hypodermic and intravenous routes, and parenterally was found to be free from toxic effects. With such an emulsion he treated 22 cases of typhoid by the intravenous method (100 to 500 millions). One patient only was lost, and he died of purulent peritonitis, following perforative cholecystitis. The injections were made in the morning, and in 19 cases there was defervescence to normal or subnormal, irrespective of the stage of the disease. After this act of defervescence the temperature in many cases went up slowly, and several

days elapsed before it reached the normal high point, at which juncture a second injection produced a permanent defervescence. According to the accompanying curves, it is seen that in one case an injection (the second) caused permanent defervescence on the 14th day. In a second case an injection on the 10th day, with temperature at 45.5° C., was followed by a gradual defervescence which was complete on the 15th day. In a third case an injection on the 8th day caused complete defervescence. The temperature slowly ascended, and from the 13th to the 22d day of the disease never went over 39° C. A second injection was followed by permanent defervescence. In a fourth case an injection on the 15th day was followed by sudden permanent defervescence. From these few cases it appears that an injection about the 15th day gives the best or most ideal result. With the temperature fall there was invariably a general improvement. The rationale of the efficacy of foreign protein in typhoid is obscure.—*Medical Record*.

ADDISON'S DISEASE IN GIRL OF 13.

The rarity of Addison's disease in young subjects gives interest to the following case:

A girl, aged 13 years, was admitted to hospital. She was the only child of a healthy mother, but her father had died of phthisis eight years previously. She had been apparently healthy till about seven weeks before admission, when she bathed in a river during menstrual period. Menstruation ceased, a rigor followed, and since that time her strength had gradually failed. The skin of the whole body was of a deep bronze color resembling that of a Hindoo. The face had a peculiar livid color, the lips were very dark, and the nipples and their areolæ were absolutely black. Other parts of the body showed irregular darker patches. The pigmentation had gradually appeared but was of recent date. The patient complained of extreme weakness which prevented her from assuming the erect or even the sitting posture. She complained of want of appetite and repeated spontaneous vomiting. The

pulse was rapid, small and almost imperceptible at the wrist, while the lowering of arterial tension was evident. There were no pulmonary symptoms and she slept well and replied intelligently to questions. On admission the temperature was normal, but after a week it rose gradually to 100 degrees, falling to normal in the morning. During the day preceding death (a fortnight after admission) it remained about 99 degrees, continuing at this level till the evening of the following day, when it rapidly rose to 102.5 immediately before death, which occurred suddenly.

She was treated without apparent benefit by adrenalin chloride in doses of five drops twice daily, the amount being increased later to seven, and ultimately to ten drops.

The necropsy showed general adhesion of the pleurae to the chest wall, evidently of old standing, but no tubercles were seen in the lungs, either on the surface or on section. The bronchial glands were intact and, contrary to rule, there was no tuberculosis of the mediastinal glands. The right suprarenal capsule was much enlarged nodular and softened. On section a caseo-purulent fluid escaped, and it was impossible to distinguish any normal tissues. The kidney of the same side showed several yellowish tubercles. The left suprarenal was enlarged, but less so than the right. It contained numerous yellow tuberculous granulations, but there was no suppuration. The left kidney also presented some scattered tubercles.

In spite of the youth of the patient the case is typical both in clinical course and postmortem findings, though the former was short and rapid and the latter so advanced as to be incompatible with life.—*The Medical Review*.

SCABIES.

Among the cases shown by Hartzell in a skin clinic at the University of Pennsylvania was an example of scabies. While scabies is a common condition it often goes unrecognized and still more often is imperfectly treated. Scabies and pediculosis are

the only two itching diseases that may be "caught." Small family epidemics are of frequent occurrence.

Hartzell points out, in the *International Clinics* for June, that the diagnosis is to be made from the fact that the disease is contagious and that it shows a predelection for certain regions.

In very young children the palms and soles are often affected. In adults the sides of the fingers, the flexures of the wrists, the anterior axillary folds, the breasts in women and the shaft of the penis in men. An itching desire situated in these regions is almost certain to be scabies. Close examination will show a few small, dotted, sinuous lines or burrows which are absolutely pathognomonic of scabies.

Ten or twelve per cent sulphuric ointment is an efficient remedy, but is too irritating for infants and young children. Hartzell recommends for the latter equal parts of styrax and olive oil, or one or two drams of balsam of Peru to the ounce of vaseline. Which ever remedy is employed it should be rubbed in from the neck to the end of the toes and fingers on three or four successive nights. This should be followed by a bath and then wait for three or four days to see whether the treatment has been successful and to avoid producing a dermatitis. If successful the treatment is repeated. All members of the family must be treated.

ERRORS IN DIAGNOSIS—A CASE AND ITS LESSON.

Charles W. Hitchcock of Detroit, in the *April Journal of the Michigan State Medical Society*, reports the case of a colored man, aged 27, teamster, whose color made impossible any accurate observations of the skin; he was admitted to hospital unconscious.

His friends and he, also, in later clear moments, attributed all of his ills to a blow received on the head ten days prior to admission. There was a positive Widal reaction.

Family and personal histories were negative. There seemed to be slight left iliac tenderness. There was some cervical rigidity, the cremasterics were absent; the arm reflexes were present and normal; the patellar and Achilles jerks were present and

normal; there was no clonus, Gordon, Oppenheim or Babinski reflex present. There was well-marked bilateral Kernig sign. Later a clonus was present in both ankles. The spinal fluid contained 1800 red cells. Wassermann was negative. There was a leucocytosis.

Two hemorrhages, doubtless from the bowels, occurred two or three days before death. They were not carefully investigated and superficially attributed to a skin traumatism.

Basal fracture and also infectious meningitis were diagnosed. The Widal was lost sight of. The autopsy showed ulcers in all the lymph follicles of the colon, and several of the lower Peyer's patches. The man died of typhoid. The positive laboratory findings were ignored, and efforts were needlessly made to correlate nervous symptoms with the history of trauma.—*Medical Review of Reviews.*

NEW METHOD OF AUSCULTATORY PERCUSSION OF THE CHEST.

Instead of employing the usual method of determining continuity of any area, of the same anatomic and pathologic nature, by noting the different intensity when the stethoscope and percussing finger (or as in the editor's modification, a tuning fork, electric buzzer, etc.) or both over the same area or not, the author places the stethoscope over the upper part of the gladiolus of the sternum, or over the upper spinous processes and finds that a consolidated area transmits a higher pitched percussion sound to the stethoscope. He also combines the location of stethoscope and percussor by using a double diaphragm stethoscope and percussing over the outer diaphragm. This latter method, we would suppose could be used in locating organs generally.

RHEUMATISM AND FOCAL INFECTION.

J. W. Shuman remarks that there would be extremely few diagnoses of "rheumatism" made today if a careful and painstaking search was made for the focus of infection and that infective

process removed. On the other hand, he thinks that focal infection is fast becoming a fad on account of which healthy teeth and tonsils are wantonly sacrificed, abdomens are needlessly opened and empirical medication (both the internal and squirting kind) persisted in. The reason is, not sometimes but always, faulty technic on the part of the diagnostician—snap-shot diagnostic work. Let us correct this by as careful and conscientious work upon the patient as can possibly be performed. — *International Journal of Surgery*.

UNCONTROLLABLE HICCUP ARRESTED BY THE OCULO-CARDIC REFLEX.

The young man was completely exhausted by the incessant hiccup which had tormented him for over twenty-four hours. Bromids gave no relief and a dose of morphine only a brief respite. A seidlitz powder caused much discomfort but did not arrest the spasms of the diaphragm as hoped. Flexing the thighs on the abdomen to force up the viscera, massage, and rhythmic traction of the tongue also proved futile. But the hiccup stopped at once when the eyeballs were compressed as for the oculocardiac reflex. The radial pulse grew slow, the hiccup stopped, and the exhausted man dropped to sleep at once. A return of the hiccup next day was aborted by the same procedure. It also proved effectual in a case of hiccup from purulent pleurisy.—*The Journal of the Am. Med. Asso.*

ACUPUNCTURE VACCINATION METHOD.

According to Dr. H. W. Hill acupuncture vaccination is thus performed: The arm is washed with soap and water, then with alcohol and finally with ether. A small drop of vaccine is deposited on the clean surface. The vaccinator's hand is closed on the arm from behind so as to draw the skin tight in front, and a sewing needle point, held slanting nearly parallel with the arm, is pressed against the skin through the drop of vaccine. Then it is

that that one-thousandth inch of the point sticks through the upper layer of the skin, carrying the vaccine with it. The needle is instantly withdrawn, and similar punctures are made beside each other until a dozen punctures are made in the space of one-sixteenth square inch or less. With a bit of gauze the surface vaccine is removed. Three sets of punctures are advised at the angles of a triangle, each side of which is 1 inch. A strip of gauze may be pinned to the inside of the shirt sleeve; no other dressing should be used. In persons who are still protected by a former vaccination or by having had smallpox, the punctured surface will redden, swell slightly and become somewhat itchy for a day or two immediately following the puncture. This is the anaphylactic reaction. In persons not so protected, the puncture spot will redden and swell in four or five days, and a smooth, pearly button about the size of a large pea will arise, which in about ten days will separate, leaving a small round scar.—*The Journal of the American Medical Association.*

OBSTETRICAL

RELATION OF THE GLANDS OF INTERNAL SECRETION TO THE FEMALE PELVIC ORGANS.

Dr. Cecil W. Vest expresses the opinion that definite conditions associated with the female pelvic organs, are indicative of an abnormal condition of some of the glands of internal secretion: that hypophysis, thyroid and ovary, are inter-related in their functions; that gland therapy is of value in cases of lactation, atrophy of the uterus, amenorrhea, and at the menopause. The writer observed that the breasts respond sympathetically to change in the pelvic organs when there is disturbance in the internal secretion of the latter; they are often painful, and in certain cases of amenorrhea, upon the ingestion of luteum extract, they secrete an opaque, watery fluid. From his observation the writer reports the case of a woman, 26 years of age, who had not menstruated for a year and a half after she had been confined eighteen months

previously and suckled her baby for twelve months. She was given the corpus luteum tablets, 5 grains each, twice daily for six months. About ten days after this treatment was started, the patient began having a profuse flow from the breasts. This condition persisted for five months, when the breast flow lessened, and a clotted menstrual flow appeared, which has continued regularly and normally since for fourteen months. Following the return of the menses, the patient felt much better and gained 17 pounds in weight. In another case of amenorrhea, the patient, aged 29, began menstruating at 14; when 22 her menses ceased until about one year ago, after she had been taking ovarian extract, 5 grains twice daily, for six months. The writer cautions against being too eager to look for quick results in cases of a long-standing condition.—*The Medical Critic and Guide*.

OPIUM IN PERITONITIS.

Crile strongly endorses the use of opium in this condition. He bases this opinion upon the results of clinical experience and the fact that peritonitis is an acute infection, that death is due to exhaustion following the expenditure of energy in the struggle of combatting the infection; the destructive effects of resulting acid byproducts; diminished intake of nourishment and insufficient sleep. Crile lays stress upon this latter factor, because in peritonitis there is severe pain, while in the acute types of the disease sleep is rare and disturbed. He therefore advises, for the purpose of diminishing the absorption of toxins, and promoting drainage, an operation under nitrous oxide and local anesthesia combined, with the patient in the Fowler position, followed by physiological rest to the intestine. To promote rest, he advises the free use of opium, emphasizing the point that the dose be graduated by its effect upon the respiratory rate and not by weight in grains, and properly pushed until the respirations are materially reduced in number. Crile declares that laboratory findings have demonstrated that this effect of opium protects the brain, the adrenals and the liver against the damaging effects of the toxins. It also

diminishes the need of food, which in turn diminishes metabolism.
—*Pacific Medical Journal*.

VAGINAL PLUG IN ANTEPARTUM HEMORRHAGE.

To plug efficiently, Tweedly says, the left hand should be passed into the vagina, the palmar surface directed toward the hollow of the sacrum, while the finger tips lie behind the cervix. Small pieces of cottonwool, squeezed out of dilute compound solution of cresol and each the size of the thumb knuckle, are then taken and inserted by means of the right hand round the cervix. The fingers of the left hand are kept busy squeezing the pellets into a compact mass and forcing the spaces between them to permit the insertion of still another plug. This process is continued in a systematic manner from above downward till the vulva is reached and the vagina can hold no more. A T-bandage is applied to keep the plug in position, and an abdominal binder is fastened tightly from above downward to press the side walls of the uterus against the vaginal dam, and thus completes the operation. A plug so applied will cause immediate cessation of hemorrhage, and when it is removed after the lapse of hours so much blood only will be found as can be accounted for by the flow that took place during the operation.—*The Journal of the Am. Medical Asso.*

PITUITARY EXTRACT IN OBSTETRICS.

Jimenez describes a few maternity cases in which he used pituitary extract, and relates his impressions as to the availability of this treatment. He declares roundly that it should never be used with a normal delivery. Watchful waiting is the science of the obstetrician, active in its passiveness. He quotes that attempts to hasten labor with pituitary extract are "useful only for the accoucheur and possibly also for gynecologic specialists later." Also that pituitary treatment is never required in a normal childbirth with a normal woman. In one case he was summoned to a woman who had been in labor several hours. All seemed to be normal

and he wished to leave as he had other important duties. The family would not consent to his departure, and to hasten matters he gave pituitary extract. Delivery occurred at once, but the deeply asphyxiated child required an hour and a half of active measures before he could safely leave it. If the mother had had hemorrhage or other complication requiring attention, he could not have saved the child. In conclusion, he lists nine formal contraindications against the use of pituitary extract in obstetrics: It should never be given when there is the slightest fear of rupture of the uterus or signs that the fetus is already suffering. It is also irrational with shoulder presentation and in most cases of pelvic presentation. It is also contraindicated in elderly primiparæ with rigid perineum. He has seen in such cases that even two or three injections failed to induce any effect, while, on the other hand, the extract is very dangerous under these conditions for the fetus and for the maternal soft parts. It is also contraindicated before the cervix is fully dilated; the cervix may be torn off completely if not fully dilated. Secondary inertia is also a contraindication, when the uterus has wasted its contractile energy against some obstacle which it has been unable to overcome, as with contracted pelvis, tumor, rigid cervix, etc. If the obstacle is unsurmountable, giving pituitary extract may entail the rupture of the uterus or the action of the extract may lead to increased inertia, or the head may be finally expelled but with the application of such force that brain or meningeal hemorrhage soon prove fatal.—*The Journal of the American Medical Association.*

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

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THE TREATMENT OF CANCER.

We believe that each year the medical profession feels more hopeful in regard to the cure of cancer. This attitude is due to the fact that the end results are more favorable. Cases come to operation before the disease has become hopelessly disseminated; operators do radical work, knowing by sad experience that an incomplete operation only serves to distribute malignant cells into tissues previously healthy. Education of the layman, especially the upper classes, has had a good effect, though in internal cancers we can not hope for much from education, except insofar as it will teach the importance of regular semiannual consultation with the family physician.

The modern treatment of cancer is not always the knife. Each case must be treated according to its individual characteristics, and the treatment can be scientifically carried out in any of the following ways, either alone or in combination:

1. Surgical.
2. X-rays.
3. Radium.
4. Chemicals.
5. Cautery.
6. Narcotics.

At the present time few cases are purely surgical. Most carcinomata should be treated before and after operation with the

X-ray or radium, since we know that both these agents devitalize and even destroy embryonic cells. In carcinoma of the breast, for instance, a preoperative radiation of the mammary gland and the axillary space tends to kill any cancerous cells which might be disseminated during operation; it is even more likely to devitalize these cells so that mitosis and propagation will not occur in other healthier parts of the body. Postoperative X-ray treatment is indicated in order to destroy any cancerous cells left after operation.

The effect of radium and the Roentgen ray are almost identical if used by those experienced in their use. Superficial cancers often rapidly disappear when treated by either of these agents, and occasionally they have a marvelous effect on deep-seated growths. We have seen several cases where large intra-abdominal growths of known malignancy have disappeared as if by magic after one or two X-ray treatments. We have also seen epitheliomata of the face, tongue and tonsils clear up under radium treatment, and have examined several cases of cancerous prostates in which radium had a very wonderful effect inasmuch as all the usual characteristics of cancer of this gland had disappeared and the patients had gained in health and strength.

Doctors Hugh Young of Baltimore and Barringer of New York City have obtained good results in bladder carcinomata with encapsulated radium. We have been fortunate in having had an opportunity to examine several of Doctor Barringer's cases during and after treatment.

When one speaks of using cauterizing chemicals, it immediately calls to mind the many quack medicines on the market, but chemical cauterants are used at the General Memorial Hospital in New York City, which is now devoted to cancer research. Of course these chemicals are used by an expert only in selected cases and usually the first treatment is carried out under anesthesia.

Nothing could be more efficient than heat in the destruction of malignant neoplasms were its action easy to control. At present, by using the water-cooled speculum of Percy, cancers of the cervix uteri are thoroughly cauterized without injury to the adjacent tissues, as a preliminary step in radical pan-hysterectomy.

Heat, however, in the form of the high frequency electric spark has proven so valuable as to revolutionize the treatment of benign vesical papillomata. While not malignant, they tend to become malignant more than any other benign growth and to treat them while still benign might be compared to operating on early cancers in other parts of the body. Furthermore, suprapubic operations for even benign vesical papillomata have never been satisfactory since implantation papillomatosis of the bladder often occurred even when the growths were microscopically benign.

It is hardly necessary to mention the narcotic treatment of cancer, except to point out that were it not for the pain-destroying properties of narcotics, many more cancers would come under treatment before inoperable than is now the case. Narcotics are here a curse as well as a blessing.

With all our therapeutic armamentarium—and the above brief citation does not exhaust it—the cancer mortality is woefully high, and our best hope will be realized when something definite is learned of the cause. Our present ideas in this respect are so chaotic that it behooves even the most humble practitioner to try to fathom this secret by following up and working out any ideas he may entertain as to the ultimate cause.—W. T. B.

THE MEDICAL PROFESSION OF AMERICA MUST SUPPLY ITS QUOTA OF DOCTORS FOR THE ARMY.

In round numbers, there are about 150,000 physicians listed in our medical directories. Deducting from this number 50,000 names of those who are not in practice or are physically incompetent, there are 100,000 doctors that should be available. Of this number the Surgeon General's Office requires 20,000, or one-fifth of the active practitioners, as officers in the Medical Reserve Corps of the United States Army.

The unfounded and possibly maliciously circulated reports of the casualties among the medical profession in the armies abroad have deterred many from applying for commissions. In reality

the number killed on the entire Western front from the beginning of the war to June 27, 1917, a matter of three years, was 195.

The lowest commission offered a doctor is First Lieutenant, which draws in pay \$2,000 a year; Captains receive \$2,400 and Majors \$3,000. The cost of equipment is about \$150 to \$175, according to the desires of the individual. As in civil life, some of us are satisfied with a \$25 suit of clothes while others pay \$50, and this applies to a medical officer in purchasing his outfit in the way of uniforms, blankets, etc.

The individual outlay when once in the service is principally your expenditure for food, or mess as it is called in military circles, and this will average about \$25.00 a month, or about \$300 a year, meaning that a First Lieutenant should have, at the end of the year, or to send home to his family or bank, about \$1,700, a Captain about \$2,000 and a Major at least \$2,500.

While this information is of interest to those contemplating applying for commissions in the Medical Reserve Corps, the fact remains that in America we have more than a sufficient number of doctors to adequately supply the demand of the Surgeon General's office without hardship to the civilian population.

The need of doctors is not alone for the mobile army, but also in concentration camps, evacuation hospitals, base hospitals and on transports. It is of decided advantage to volunteer your services and receive the benefit of the very necessary training accorded physicians in medical training camps. It is a safe assumption that for those who receive such training and show their aptitude for the service, advancement will be rapid.

Applications for commissions in the Medical Reserve Corps will be found printed in medical journals or will be sent to you by your local examining board or by the editor of this paper. Apply for your commission *now*. *Your country needs you.*

LIBERTY BONDS PREFERRED STOCK.

Likening the United States to a great corporation with more than a hundred million stockholders and with capital stock and

resources of more than two hundred fifty billions of dollars, and an annual income of fifty billions of dollars, each American citizen is a stockholder in this great corporation. Even those whose only assets are their earning capacity own shares in our public domain and property and are working on a profit sharing basis with a vote and a voice in the management of the corporation and with the right to acquire more stock at any time.

A Liberty Loan Bond may be likened to a share of preferred stock in this gigantic corporation. Like preferred stock in other corporations it may not return, at times, so large a dividend as common stock, but the dividend from it is certain and sure. It is stock that pays $3\frac{1}{2}$ per cent dividend but the stock and dividend can not be taxed and while crop failures may decrease the farmer's dividend from his land some years to less than nothing, and various causes may lessen or destroy dividends from all other sorts of property, the dividend from the Liberty Loan Bond is certain and sure, subject to no failure or diminution.

The owner of a Liberty Loan Bond holds written tangible evidence of being a preferred stockholder in the United States, the greatest, the most glorious, the most honorable and the most successful corporation in the world. He holds the certificate of being a citizen willing to support his government and to lend money to his country when it needs it and calls for it.

There is honor in being the owner of a Liberty Loan Bond as well as profit.

A TIME TO SAVE.

There is only one thing certain about the financial and commercial conditions that peace is going to bring and that is their uncertainty. It may be that an era of great prosperity may be upon us; it may be an era of stagnation; it may be an era of the severest competition we have ever experienced.

It involves a paradox, but in this present time of comparative commercial peace, for the great war has largely stopped for a time the struggle among nations for foreign commerce, it is a

wise thing to prepare for the economic war that will succeed the present world-wide war.

It is well for every American citizen to lay aside in some absolutely safe security something for that day that is coming. If it be great prosperity one will be able to take advantage of it. If it be stagnation one will be better able to withstand it.

No better provision could be made for the future than an investment in Liberty Loan Bonds. They are absolutely safe and no possible condition can destroy their value; exempt from all taxation except estate or inheritance taxes the income from them can not be lessened; with a market everywhere in the United States and, as competent financial authorities assert, a market in every commercial center in the world when peace comes, they will be readily convertible into cash. They possess all of the elements that would attract a sound investing mind in times of uncertainty.

More than that an American citizen investing in Liberty Loan Bonds is investing in victory, for the proceeds of the Liberty Loan Bonds are to win the war and bring peace in Europe and peace and safety to the rest of the world.

PATRIOTISM WILL TELL.

Much has been said and written unofficially about the possibility of conscripting the medical profession to supply the desired quota of physicians for the immense army that our government is now raising.

Physicians are as essential to the success of an army as munitions, and if our troops are to be the deciding factor in the terrible conflict now raging in foreign lands, the Surgeon General's office must be supplied with a sufficient number of doctors in the Medical Reserve Corps to take care of the full complement of troops in the field, on transports, in Evacuation Hospitals and Base Hospitals, in Concentration Camps, etc.

While it is no reflection upon any man's honor to be conscripted, at the same time we feel sure that a sufficient number of doctors

will volunteer their services at an early date, which means considerable to the individual so applying.

It is reasonable to suppose that those who volunteer early and receive the benefit of instruction in a Medical Training Camp, will be the ones who will receive advanced commissions. The lowest commissions offered to a doctor is that of First Lieutenant, and it draws the pay of \$2000 a year; Captains receive \$2400 and Majors \$3000.

The principal expense to a medical officer will be his mess charges or food, and this should not be over \$25 a month or \$300 a year in round figures.

Whatever may be the pay, the fact remains that the Surgeon General must have at least 20,000 physicians in the Medical Reserve Corps to supply the present demand, and we feel that the patriotism of the medical profession will be the stimulus that will induce a sufficient number of doctors to offer their services voluntarily.

Blanks for commissions in the Medical Reserve Corps are now appearing in medical journals or will be supplied you by the Board in your own State. If you do not know the location of this Board, the Editor of this paper will be glad to inform you or send you a blank upon request.

NATIONAL BOARD OF MEDICAL EXAMINERS.

To the Editor Nashville Journal of Medicine and Surgery:

MY DEAR DOCTOR—The National Board of Medical Examiners held its second examination in Washington, D. C., June 13 to 21. There were twenty-four qualified candidates, twelve of whom appeared for examination, the others having been ordered into active duty between the time of their application and the date of the examination. Of the twelve who took the examination nine passed.

The next examination will be held in Chicago, October 10 to 18. The regular corps of Army and Navy may be entered by success-

ful candidates, without further professional examination, providing they meet the adaptability and physical requirements.

There will also be an examination in New York City in the early part of December. We will appreciate notices of these facts in your journal.

Very truly yours,

J. S. RODMAN, M.D., *Secy.*

A HERITAGE.

What more honorable heritage can you leave your children than a Liberty Loan Bond? It will give them the right in after years to refer with pride to you as being one of those Americans who, at their country's call, honorably, willingly and patriotically supported their government in this great war and lent of their wealth, their savings or their earnings to help bring victory to our armies and a triumphant end to this war for freedom and humanity.

Washington, July 27, 1917.

DEAR DOCTOR:

The Bureau of the Census is planning to prepare and publish a monograph on the Mortality from Tuberculosis covering the calendar year 1918. To make this work of greater value an endeavor is being made to obtain the coöperation of all physicians to the extent of carefully recording or supervising the statements of occupations upon the death certificates during that year. Circular letters to this effect have been sent to all the physicians in the United States and a few words along the same line in your Journal would, I feel sure, be of great benefit and would be deeply appreciated by this Bureau.

The following extracts from the circular letter might well be published in your Journal to serve as the text for any additional comment:

More accurate and definite statements of the occupations of decedents should be written upon death certificates. Until this is done mortality statistics by occupations will continue to be unsatisfactory.

The Bureau of the Census is planning for the near future a monograph on tuberculosis. How much more valuable this monograph will be if it is possible to show accurately the occupations of decedents.

As a physician you appreciate the importance of such statistics. As a physician you are by education better qualified than the ordinary informant to understand a proper statement of occupation.

Will you not, therefore, take pains to see that the occupation items upon each one of your death certificates are properly supplied:

Thanking you for your coöperation, I am,

Very truly yours,

SAM L. ROGERS, *Director.*

Reviews and Book Notices

The Causes of Tuberculosis—Together with Some Account of the Prevalence and Distribution of the Disease. By Louis Corbit, M.D., F. R. C. S., University Lecturer in Pathology, Cambridge. Cambridge. At the University Press. 1917.

We are indebted to the obliging publishers for a copy of this classical work. This book is one of a series of volumes entitled the Cambridge Public Health Series to be published from time to time by the Cambridge University Press on subjects relating to the public health. This one of the series under the editorship of G. S. Graham-Smith, M.D., and J. E. Purvis, M.A., treats fully and exhaustively of the causes of tuberculosis. In line with the world-wide campaign for the lessening of the mortality from the Great White Plague it is addressed to those who are interested in the stamping out of tuberculosis. It is a notable fact that the ravages of the disease have been very materially lessened in the last few years and with the efforts that are being put forth we can hope that in the not distant future the world may become rid of this incubus.

The tubercle bacillus and its varieties are fully dealt with, treating of their distribution, cultural characters and virulence.

The book is addressed to all interested in stamping out the disease and therefore should reach a class of readers who are not physicians, such as health committees and workers in hygiene and, on that account, is free from technical language. The relations of animal and human tuberculosis are fully presented. Every phase of the subject has been treated in a masterful manner and the book is really a gold mine of the question in book form.

Publisher's Department

Chemical Food is a mixture of Phosphoric Acid and Phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Company, incorporated, to whose advertisement (in this issue) we refer our readers, have placed upon the market a much improved form of this compound, "Robinson's Phosphoric Elixir." Its superiority consists in its uniform composition and high degree of palatability.

A HOT WEATHER SUGGESTION.

One of the difficulties attending the employment of cod liver oil in hot weather is its proneness to cause unpleasant gastric disturbances resulting finally in the patient's inability to continue with the oil. The best way to obviate this difficulty is to use Cord. Ext. Ol. Morrhuæ Comp. (Hagee). This preparation is so palatable and acceptable that it does not give rise to the disagreeable effects of the plain oil or an emulsion, and may be used as freely during hot weather as during any other time. Furthermore, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is just as effective therapeutically, containing, as it does, every property of the oil that is of advantage.

DEFICIENT GLANDULAR ACTIVITY.

With hundreds of physicians it is a routine practice to depend upon IODIA (Battle) in glandular sluggishness. A well balanced formula, IODIA (Battle) possesses unusual therapeutic potency, and has distinctive merit in overcoming inactivity of the glandular apparatus. A marked advantage of IODIA (Battle) is its palatability and the tolerance of the stomach to it. This feature makes it of particular value in children who are oftentimes afflicted with a chronic glandular enlargement which is a pointed indication for IODIA (Battle). It may be pushed with a minimum of untoward effects.

ADVANTAGES OF PASADYNE AS A NERVE SEDATIVE.

The advantages offered by PASADYNE (Daniel) in those conditions demanding sedation lie in its marked therapeutic potency and its freedom from untoward after-effects. And when it is remembered that most of the regularly employed agents for the purpose give rise to immediate or remote evil effects, such as gastric disturbances or habitual addition, the actual value of these advantages becomes all the more apparent. PASADYNE (Daniel) simply a concentrated tincture of

passiflora incarnata, shows its calming power in all states marked by hypercerebration or exalted function of the nervous system. It may be used with a feeling of confidence in women and children.

FOR THE CLOGGED LIVER.

When the liver does not act as it should, the zest of life departs, and the saying that "life and living depend upon the liver," although somewhat facetious, contains more than a modicum of truth. An engorged liver, of course, signifies that the organ requires active stimulation, especially when the condition is attended by manifestations of auto-toxemia. If any one fact has been more definitely established than another it is that such stimulation should not be brought about by the use of drastic cathartics, for if so, the remedy is frequently worse than the disease in its sinister effects. What is particularly needed is a means of stimulation which will satisfactorily increase the functional activity of the liver, without setting up catharsis or over activity of the bowels.

The above needs are well met by Chionia, an exceedingly effective and reliable preparation of *Chionanthus Virginica*. This well known product exerts a distinctly specific action on the liver and is probably one of the most efficient remedies at the command of the physician for stimulating the hepatic function. Administered in regular and appropriate dosage it increases the flow of bile, relieves congestion of the biliary passages, promotes digestion and although it cleanses the intestinal canal it accomplishes this without purging or griping.

Chionia, therefore, has proven of extraordinary value in the treatment of all functional disorders of the liver, especially those grouped under the value term "biliousness" and characterized by digestive disturbances, jaundice, constipation or diarrhea, headaches, and auto-toxic symptoms generally. The prompt and decided results that uniformly follow the use of Chionia furnish convincing evidence of the utility of this trustworthy product.

HEART TROUBLES.

Numerous persons, especially those of middle age and past and who live sedentary life, suffer from worrying heart symptoms. As a rule, no organic lesions can be detected but the functional disturbances which are generally in evidence, are a source of constant alarm. Oftentimes, a person's life is made a burden by the pain and other sensations which affect the heart.

Such cases give the physician an infinity of bother. In the first instance, the patient's manner of living must be regulated, appropriate diet must be prescribed and excessive indulgence in narcotics or stimulants must be interdicted.

A regimen of this nature, however, while essential will not effect a complete cure. A therapeutic remedy which will give tone to the tired heart, but which will not act as a spur is needed. The heart requires persuasion instead of driving. *Cactina Pillets* will not only effect this

object but possess the great advantage over the majority of heart remedies—that they have no cumulative action. Consequently, there is no safer heart tonic known than Cactina Pillets. In all cases of functional heart affections their use is strongly indicated, for they un-failingly bring back the heart's action to its normal rhythmical ebb and flow and the patient's fears vanish accordingly.

THE RATIONAL TREATMENT OF ATONIC DYSPEPSIA.

Glandular inactivity of laziness is probably the chief cause of the various manifestations of dyspepsia and indigestion. In the stomach this common disorder causes the usual symptoms of pain, fermentation and distress, which it is not necessary to discuss, and also unquestionably contributes to the development of gastrectasia and ptosis. In fact, it is surprising how many cases of organic disease of the stomach results from the commonest dyspepsias improperly treated or not treated at all.

In such cases of dyspepsia and atonic indigestion, in which the glands of the stomach are not doing their full share of work, and the muscular insufficiencies which eventually result are in the making instead of giving muscular stimulants like strychnia, one should try to promote **the work of the glands** by using a recognized secernent like Seng. This well-known product of the laboratories of the Sultan Drug Company, St. Louis, Mo., is a remarkably efficient stimulant to the gastric glands. The simplest test will prove its value, and show the wisdom of aiding and promoting physiologic functions rather than to supply substitutes. The usefulness of Seng has been demonstrated in all forms of atonic indigestion, particularly those incidental to neurasthenia, general debility and protracted convalescence from fevers, surgical operations and so on.

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Original Communications

EPILEPSY.

BY C. L. LEWIS, JR., M.D., NASHVILLE, TENN.
Formerly House Surgeon Bellevue Hospital, New York City.

Mr. President and Gentlemen of the Academy:

In presenting this dissertation upon the subject of the evening, I do so with trepidation, fully recognizing its gravity, and the fact that many more worthy than myself have written upon this subject without giving us true insight to its mysteries.

The loss of equilibrium being the first symptom to attract attention, this disease was known to the early writers as "the falling sickness." Since that time the term has been applied to a far wider range of phenomena, which are characterized by, 1st, Sudden loss of consciousness with convulsions; 2nd, Sudden loss of consciousness without muscular implication; 3rd, Muscular convulsions without loss of consciousness, as well as to certain mental phenomena.

It is probable this disease has been known since the time of Christ, but our more exact knowledge has been gained largely within the last twenty years—due to our more exact knowledge of anatomy and the functions of the nervous system. The prin-

cial forms assumed by epileptic affections are as follows: 1st, Grand Mal, 2nd, Petit Mal; 3rd, Convulsions without loss of consciousness; 4th, Vertigo; 5th, Double consciousness; 6th Hystero-epilepsy; 7th, Laryngeal epilepsy; 8th, Procursive epilepsy. The so-called laryngeal epilepsy, or, vertigo, is unquestionably a variety of epilepsy. It consists of a slight loss of consciousness, the cause of which has been found to be some laryngeal, tracheal or bronchial affection, such as laryngeal tumor, asthma, etc. Procursive epilepsy consists of running movements forward, but otherwise presenting the usual phenomena. It may alternate with ordinary epilepsy, precede it or merge into it.

I knew of an interesting case of this variety at the East Tennessee Asylum, at Knoxville, Tenn. It was that of a boy who invariably put his hands in his pockets, and whistling with all his might, ran up and down the ward, until, with a wild cry, he threw up his hands and fell in a well-defined fit. Hystero-epilepsy is the name given to an odd combination of epilepsy and hysteria. Hystero-epilepsy rarely begins as true epilepsy, but generally with tonic convulsions, followed by the so-called purposive acts, clownishness or absurd acts of all kinds; opisthotonos, distended abdomen, cramps, passionate attitudes, etc. The condition of double consciousness occurs after the attacks of grand mal and petit mal. Many of the cases that figure in the newspapers of people wandering away from home and coming to themselves afterward in a far away place may be ascribed to this form or condition of epilepsy. Such attacks are characterized by acts on the part of the patient, of an impulsive and unnatural character, of which he is unconscious. They simulate in some cases attacks of momentary insanity, during which patients will often wander through crowded thoroughfares, commit acts of immodesty or indecency, uttering lewd expressions and committing acts of violence. Some suddenly find themselves standing or sitting in unexpected places, as in a closet, or committing some act of which they had no will, and often no motive to perform. Kleptomania may be attributed to this form of epilepsy. In some cases convulsive movements alone occur. Gray cites a case who would not carve because of the ten-

dency his arms had to fly apart and whirl carving knife and fork in eccentric circles.

We find a sensation of vertigo frequently accompanies epilepsy, and are found quite frequently in the interval between the attacks. Petit mal consists of a loss of consciousness, so slight that it seems often like absent-mindedness. I have seen patients attacked whilst in the act of drinking a cup of coffee, stop short in the act, stare in a dazed condition, and then resume the act as if nothing occurred. These cases vary in severity from the mere fibrillary twitching of a muscle to those cases of epilepsia major, into which they insensibly merge. In many of these attacks there are certain sensations, which occur previous to the convulsive movements. These sensations, which are called "auræ," vary in kind and degree. They have been described to me as a hot or cold belt of constriction, passing upward from the extremities, the general attack supervening when the aura passes into the cervical region of the cord. I believe this sensation to be a vaso-motor wave, causing a spasmodic action of the blood vessels.

It would, indeed, be superfluous for me to describe an ordinary epileptic attack before this learned audience, so I will content myself by directing your attention to those more obscure cases wherein, I believe, lie the open sesame to a more thorough knowledge of this truly distressing affection. The many phases which this disease may assume (the gradual transition from the mildest forms to that of epilepsia major), can be approached in comparison only with one other disease, *i. e.*, that of insanity.

Indeed, gentlemen, epilepsy is so nearly akin to insanity that its worse forms we designate as "epileptic insanity." I have been told by patients that during an attack they have impulses to commit acts of all kinds, have lascivious thoughts and utter lewd expressions. From the rythmical twitching of an eyelid to the awful convulsive seizure, which we so frequently witness on our streets, from the hysterical laugh to the foaming mouth and gnashing teeth, I have seen men, eminent in our profession, stand by helpless from the sense of our little knowledge of this purely nervous trouble. There has been, according to all authorities on this subject, and to my conviction, more flagrant ignorance shown by the

medical profession toward the management of this disease than to any two disease we come in contact with. The marked abuse of bromides in this affection has led many of the best practitioners to abandon its use, as detrimental to the patient. With those gentlemen I most happily concur. I do not think it rational to substitute brominism, with all its attendant evils, to mask the cause and defeat the treatment. Find the cause and treat your case intelligently. There is no such a thing as "idiopathic epilepsy." All effects have a cause. Epilepsy, in my opinion, is due to the want of a stable equilibrium of the circulation. I started to say "cerebral circulation," but I think facts will bear me out in my first statement.

I have looked in vain in some of our latest textbooks for a statement of the bounding heart, the full and incompressible pulse, the cold extremities, the gastro-intestinal disorder, the foetid breath, the coated tongue, and many other symptoms that accompany this disorder.

The trouble is that many of our best writers seem to think of epilepsy as being a head trouble, pure and simple. In this assumption they are greatly mistaken. Epilepsy is a disturbance of the nervous system, to a great extent the vaso-motor system, created by the reflex action of a peripheral stimulus, acting on a perverted nervous constitution. Many reflex stimuli, which cause epilepsy in perverted persons, do not cause serious trouble in health, and I believe right here is the gist of this whole matter. This perversion may be inherited or acquired, and is closely related to, and may alternate with chorea, migraine, various neuralgias, and many other nervous affections. In enumerating the reflex causation, I shall place eyestrain in a prominent place. There is no doubt in my mind but that the influence of the eye upon the brain and nervous system is great, and that a disturbance of its function may cause great damage to the cerebrum. This effect is well exemplified in hypnotism, many subjects throwing themselves into a hypnotic trance by concentrating their eyesight upon some bright object. If this effect can be obtained from simple concentration, what could an over-acting eyestrain produce? In the same way I believe epilepsy can be produced by afferent impulses from the

five special senses—sight, hearing, smell, taste and sensibility. An ulcer of the rectum, fissure of the anus, stricture of the urethra, fractured skull, decayed teeth, injuries to nerve trunks, cerebral tumors, masturbation, over-sexual indulgence, syphilis, and many other causes could be enumerated. The main pathological changes found in old cases are secondary to a series of circumstances, which has, indeed, created a new nature—an epileptic nature. From recent cases where we find no pathological changes to cases of long standing, where we find evidences of chronic meningitis, old extravasations, sacculated blood vessels, sclerosis, congestions, anæmia, softening, tumors, old depressed fractures and many other changes which I have not time to mention. This is, to a great extent, a vaso-motor disease. Undoubtedly, the same system that controls the blood pressure has an important place in the pathology of this disease. Drugs that control the blood pressure the best are the most valued remedies in the treatment.

I have, with the unaided use of ergotole, controlled mild cases and lessened others. In other words, restored a stability to the circulation which had been lost, and thus producing that calm, confidence we find in the deep and powerful undulations of a normal pulse. Thus we find that class of remedies which restore tone to the circular muscular fibres of the arterial wall, in conjunction with certain cerebral sedatives to allay the perverted irritability of the motor cells of the cerebrum and spinal cord, are the most useful remedies in controlling the convulsions. I shall sum up, in a few words, the treatment that should be followed, in accordance with the views I have expressed:

1st. See that all possible reflex causes have been attended to. To this end, all the special senses should be carefully examined. These are the afferent avenues by which the brain gains knowledge of the outer world, and are, of course, the chief causes of reflex activity. 2nd. Put your patient on a rigid diet of the most digestible articles of food. These patients have perverted appetites, and are prone to overload their stomachs. See that the secretions are well regulated, that their tongues are not coated, that their breath is not offensive, but sweet, that their liver is not torpid, that their skin is not allowed to become clogged, but that it is

kept soft and healthy by frequent ablutions, friction, massage, electricity, etc. 3rd. Be careful with your moral treatment. These patients are inclined to be willful, arrogant, peevish, irritable, gloomy, morose and perverse. So that a positive firmness must be brought to bear upon them. If necessary, a nurse should be provided to see that your every instruction is carried out. An out-door life should be prescribed as far as possible. 4th. Occasional calomel purges. This I have found to be of much value. I know I have prevented attacks of petit mal by timely doses of calomel. A simple combination of ergotole 10 min., tinct. digitalis 7 min., and chloral $7\frac{1}{2}$ grains, I have found to be the most effectual in petit mal. In one case of seventeen years standing I have prevented attacks for long periods and lessened severity by occasional doses of this combination. In more severe cases I put my patients on large doses of ergotole, extract gelsemium fluid, with small doses of chloral, bromides and digitalis, and in some cases blood letting.

In closing this paper I do so with a due sense of the gravity of the subject under discussion, and with the hope that others may corroborate my views upon epilepsy.

P. S.—Credit is given Dr. Landon Carter Gray for the classified forms.

Selected Articles

TREATMENT OF THE VOMITING OF PREGNANCY WITH OVARIAN EXTRACT AND CORPUS LUTEUM.

BY P. J. CARTER, M.D., NEW ORLEANS.

Without going into the chemistry, pathology, and physiology of this disease, I shall attempt to give only the treatment that has been most efficacious in my hands. We know that vomiting of pregnancy, and especially the pernicious type, is a most common complication of the parturient.

It is most unfortunate that our present knowledge of the subject is so limited and involves so many questions. Seeing these poor unfortunate mothers, fighting with death from constant and long continued nausea, that leads to serious results from inanition, with the constant distress it occasions, impresses upon us the fact, that we have to contend with a serious and treacherous disease.

This condition may make its appearance during any stage of pregnancy. It may appear a few weeks after conception, and continue for a few days, or it may continue throughout the whole of pregnancy. It may make its first appearance during the latter half of pregnancy, or even during the last month. I have had occasion to treat two such cases recently.

One of our foremost writers, in dealing with this subject, says :

"Functional diseases may be so transient as to cause only a temporary inconvenience, while others are so grave as to endanger the life of the patient. Very often the vomiting of pregnancy is due purely and solely to local causes in connection with the gravid uterus, be it a mechanical pressure, a displacement, or some morbid condition of the uterus. Then again we see those cases in which the cause is simplex, and we are unable to define it, though it may be said to be due partly to pressure, partly to sympathetic

irritation, or partly to nutritive changes produced by the pregnant uterus."

Whether this disease has its initiation in the reflex, neurotic, or toxic variety, the treatment I shall outline is the same. On account of the lack of knowledge as to the causation of this disease, much study and countless remedies, and forms of treatment, have been suggested for its relief. Fisch, in 1884, reported a case of the severe form of vomiting of pregnancy cured by the use of thyroid extract. Seigmund reports a case cured by the evacuation of a densely packed colon.

To continue with the more modern forms of treatment, Pinard used eliminative measures, since he believed that intoxication was responsible for the tendency of pregnant women to vomit. Somers (*Western Medical Review*, November, 1910) treated his vomiting cases by the Ochsner treatment for appendicitis. Martin, of London, used gastric lavage, together with dieting and elimination.

The very latest method of treatment before the use of ovarian extract and corpus luteum was that of Fieux and Dantin. They used the serum of healthy pregnant women who were at the same state of pregnancy as the affected ones, giving it intramuscularly into the buttocks in varying quantities, depending upon the gravity of the case. Their reports have been very encouraging.

I began my experiments in the treatment of nausea of pregnancy in October, 1915. It was through the coöperation and kindness of Parke, Davis & Co., and Lilly & Co., in supplying me with enough ovarian extract and corpus luteum to carry out my experiments. I had never heard of ovarian extract being used to control the vomiting of pregnancy, therefore I began on a purely experimental basis. At the Lying-In- Hospital of New York, where I had the pleasure of serving as house surgeon during a term of 1913-14, I saw and treated quite a number of these cases. At that time we only knew of and practiced the eliminative measures to control the vomiting, just as we did in our eclamptic cases. Our results were not very encouraging.

Since October, 1915, I have had twenty consecutive cases. I report these on account of the phenomenal success obtained. Every case responded satisfactorily, and without a single failure, though

in a few cases I found it necessary to increase the dosage. The duration of vomiting after beginning the treatment, averaged from one day to two weeks; the general average being ten days.

To give an idea as to the varying quantity of the drug and the duration of vomiting after medication, the following case reports are given:

Case 1—Mrs. H., age 22, para II. In her first pregnancy had severe nausea and vomiting. At that time she was six weeks pregnant. Abortion performed. A second pregnancy followed three months later with the same distressing symptoms. Twelve doses of ovarian extract, five grains each, were given three times a day, at the end of which time the condition was relieved entirely. At her fourth month, she began to vomit again. The same treatment was again given, after which she went to full term and was delivered without any recurrence of the nausea.

Case 2—Mrs. S., aged 23, para I. Was seen by me in her second month. Simple nausea every morning but very distressing. This had continued two weeks before I saw her. Six tablets of ovarian extract were given, though three controlled the nausea completely. She is now eight months pregnant, and has not had the least discomfort since her first medication.

Case 3—Mrs. F., para IV. Three and one-half months pregnant, former pregnancies normal, no nausea. Vomiting began at six weeks, and had continued daily since. Vomited several times a day, irrespective of meals. She was extremely emaciated, countenance pale, skin cold and clammy. Temperature 100°, pulse 116. She was given eleven tablets of ovarian extract, five grains each, over a period of thirty-six hours, at the end of which time her vomiting was completely checked. Fortunately she did not vomit the medication.

Case 4—Mrs. F., age 25, para II. No nausea or vomiting with her first pregnancy. When first seen was five months pregnant. Extremely emaciated, cold and clammy skin. Temperature 101, pulse 120. Loss of weight in past two months had exceeded 20 pounds, and her vomiting had continued since the second month. The drain upon the body had been so severe that she was in a delirious state most of the time. Stomach rejected everything. Glucose, 5 per cent solution was at once started. Twelve doses of

corpus luteum by needle was given over a period of 24 hours, making the injections every two hours. At the end of this time she was a great deal better, and could retain ovarian extract by mouth. For several days ovarian extract was given three times a day. After the twelfth injection of corpus luteum she was able to retain liquids by mouth. In two weeks she was on a solid diet, and there was complete abeyance of all nausea and vomiting.

I do not contend that ovarian extract or corpus luteum will cure every case of vomiting pregnancy, but it will largely control those of the toxic type. My experience with Copeman's method and the bimanual replacement of a displacement, have not been very encouraging. I have attempted to correct many of these displacements, to find relief only by the administration of ovarian extract.

With my limited experience with these drugs, I give the ovarian extract alone where there is not incessant vomiting, and the patient's stomach will tolerate it. The ovarian extract seems to give the quickest relief, and the patient is not annoyed by the repeated use of the hypodermic needle. In cases of a more serious type, in which the patient vomits everything, then we rely upon our corpus luteum by needle. For the reason that patients object to the needle, and the lengthened time (in my experience), to get results with the corpus luteum, I begin my ovarian extract as soon as the stomach will tolerate it. Corpus luteum has been a life saver in those grave cases, in which vomiting was incessant, and should be administered as long as the patient is in such a perilous state.

The literature upon these two drugs in the treatment of vomiting of pregnancy is extremely scarce, so much so that barely half a dozen papers have been devoted to the subject. John C. Hirst, (*Jour. A. M. A.*, Vol. LXVI, No. 9) gives a preliminary report of five cases with 80 per cent success. In these cases he administered corpus luteum only and by needle. Later on he was able to add a few more cases to his experiments, which increased his percentage to 84 per cent. The smallest dose used in this series of cases numbered four; the largest forty-two, the average dose was 11.

From these statistics we should be convinced of the virtue of twenty consecutive cases treated successfully, should cause every obstetrician to give this treatment a thorough investigation as to its therapeutic value.—*New Orleans Medical Journal*.

Extracts from Home and Foreign Journals

SURGICAL

INJURIES TO THE PANCREAS FOLLOWING OPERATIONS ON THE RIGHT KIDNEY.

Hugh H. Young and J. A. C. Colston (James Buchanan Brady Urological Institute, Johns Hopkins Hospital) suggest that many cases of severe postoperative distention may be due to injury to the pancreas during kidney operations. Such injury may occur, as is shown by the autopsy on one case described, and is a most serious accident. The pancreas extends around the duodenum to the point where it is nearest the kidney, and at this point the structures are fixed so that they can not recede in case of trauma. In the case mentioned, an aberrant artery to the pole of the kidney made necessary the use of clamps in the depths of the wound, the pancreatic tissue being crushed. The authors advised greatest care to avoid this event.—*Journal of Urology*.

ROENTGENTHERAPY IN DEEP-SEATED MALIGNANCY.

James T. Case, in discussing the present status of this method, states that he does not believe in submitting operable malignancies to radiotherapy, in place of surgery. The use of the roentgen rays and radium, at least for the present, should be restricted to pre- and post-operative irradiation, and to treatment of inoperable malignancies. Radiotherapy does destroy cancer cells. This destruction can be brought about without serious injury to the neighboring normal tissues. The destructive effect is a deep one, both for radium and the roentgen rays. The roentgen rays have a much greater intensity and penetration than is usually appreciated. The ideal method is to employ a combination of radium and roentgentherapy in all cases of tumors, affecting cavi-

ties of the body. There is no question about the possibility of effecting a local cure of cancer in the human body. We lose our patients in the end because of inaccessible metastases. But in the way of palliation of suffering, prolongation of useful life and, in a few unexpected cases, clinical cure lasting a decade or longer, there is no other known therapeutic agency that can equal the results of radiotherapy.—*International Journal of Surgery.*

LOCAL ANESTHESIA IN SIXTY CASES OF ACUTE AND CHRONIC APPENDICITIS.

Joseph Wiener says that he has been using local anesthesia in more and more acute cases of appendicitis and thinks that peritonitis, far from contraindicating performance of the operation under local anesthesia will gradually become an indication for this operation. When we consider that the system is already struggling to throw off a peritoneal infection, and that the organs of excretion are doing a large part of this defensive work, the danger of handicapping these organs still further is apparent. Of the sixty cases which furnish the basis of this communication, forty-one were chronic and nineteen were acute. The acute cases included empyema of the appendix, gangrene, large abscess of the appendix and two cases of well marked peritonitis. Including both the acute and chronic cases the average time of operation was twenty-two minutes. Postoperative distention was strikingly absent in most all of the cases, and the writer considers this one of the great advantages of local anesthesia. With the exception of the peritonitis and abscess cases, nausea and vomiting were almost uniformly absent in these cases. The average stay in bed, including both acute and chronic cases was a little less than seven days. The local anesthetic consists of the following: Three quarters of an hour before operation the patient receives a quarter of a grain of morphine hypodermically. Just before operation this dose is usually repeated, unless the patient appears drowsy from the first injection. A one per cent solution of novocaine to an ounce of which twenty drops of 1:1,000 solution of epinephrin

have been added is used. Tablets of novocaine with epinephrin are a great convenience. The writer dissolves five one-grain tablets in an ounce of water and this suffices for the complete operation. He finds the post-operative course in these cases in striking contrast to what we see in cases that have had ether. A few hours after the operation there is little wound pain, which is easily controlled. Peristalsis is usually established early. Almost all the patients have been able to take and retain fluids within a few hours after the operation. There is an entire absence of the mental depression so common after ether. The writer says he intends to use this method in an ever-increasing number of cases, and believes that in not a few cases it will actually be life-saving.—*Medical Record*.

THE REPLACEMENT OF MORPHINE IN SURGICAL PRACTICE,
WITH A REPORT OF 110 CASES.

In the *Long Island Medical Journal* for May, 1917, Schall gives these results from clinical tests on pantopon:

He replaced morphine medication in the surgical wards by using pantopon.

The sedative effect of pantopon was very noticeably greater than that of its morphine equivalent. Respiratory and cardiac depression were far less marked than when morphine was used.

Postoperative nausea or vomiting and constipation were very much reduced through the new method of procedure.

Intestinal stasis or paralysis and anuria were not observed in a single case. Patients suffered no inconvenience when administration of pantopon was discontinued.—*The Therapeutic Gazette*.

SARCOMA OF BOWEL IN A CHILD.

D. K., age 5 years, complained of more or less pain in the bowels for five or six weeks previous to my being called to attend her. She was treated with various kinds of cathartics during this time, as it was also noted that her bowels were more or less constipated.

On being called, I was told that the child had had no movement of the bowels for five days. The child had a temperature of 102 degrees F, pulse 140, and had vomited fecal matter. The abdomen was very much distended and painful all over.

Diagnosis of obstruction with coexisting peritonitis was made and operation advised, which was consented to. The same evening, with Dr. F. F. Knorp, the abdomen was opened and a tumor of the ileum and three inches on either side was resected and an end to end anastomosis made. The child made a good recovery and at the present time is feeling better than at any time for months past and has increased in weight.

Pathologist's report: "Examination of sections made from specimen shows lymphosarcoma."—*Pacific Medical Journal*.

PROJECTILE IN THE HEART.

Pezzi calls attention to a case recently reported by Ascoli in which a shrapnel ball entered the back in the iliac region and its course was traced by radioscopy along the vena cava and into the right auricle where it seems to be harmlessly sojourning. The symptoms at the time of the wound and while the projectile was in the vein were quite severe, but since it entered the heart there has been no appreciable disturbance. It has probably become coated with fibrin, and as it is tossed about in the blood stream pouring through the heart, it probably gets no chance to come in contact with the walls of the auricle, and the retrograde current as the valves close keeps it away from the valves likewise. In ten cases on record of a projectile in the heart, an attempt was made to extract the projectile. Four of the patients died, but the operation was a success in six cases. But even in these favorable cases there were threatening heart and pulmonary disturbances. Ascoli does not advise any operation in his case as the lungs are diseased and the general health poor. The case confirms the prevailing physiologic conceptions as to the mechanism of the action of the atrioventricular valves.—*The Journal of the American Medical Association*.

MEDICAL

SIMPLIFIED TECHNIC FOR DETECTION OF AMEBAS.

Ravaut says that if the amebas in the feces have still any vitality left, they can be started up to move about by heating the slide as it lies in the microscope. The flame of a match or a small tampon dipped in alcohol and held under the slide will answer the purpose, or with a dentist's heated rubber bulb a jet of hot air can be directed on the under side of the slide. The cysts can be shown up best by impregnating them with a mixture of 0.5 gm. iodine and 1 gm. potassium iodide in 50 gm. distilled water. If feces are treated with a 5 per cent solution of liquor formaldehydi the cysts keep well for months. He puts 5 c.c. of this solution in a test tube with a lump of feces about the size of a pea. The tube is plugged with non-absorbent cotton, and it is shaken up until the contents are well mixed. They will keep then for months and the cysts show up clearly.—*The Journal of the American Medical Association.*

DIET IN TYPHOID AND PARATYPHOID FEVERS.

In a recent work on typhoid Vincent and Muratet state that in France milk is the great reliance in feeding typhoid and paratyphoid patients. The milk is always boiled for ten minutes at least, giving up to 2 liters with at least 2 liters of other fluid. The milk can be given hot or cold, and flavored with tea, coffee, brandy or rum, vanilla, orange flower water, or a drop of oil of anise to a cup of milk, or the milk can be made acid or effervescent. In case of absolute intolerance for milk, kefir or koumiss may be substituted, or a strained vegetable broth or gruel. For the latter they use a mixture of a tablespoonful each of barley, wheat, crushed corn and hulled beans, peas, and lentils, boiled for three hours in 3 liters of water, salted and strained. Every hour or half hour a glass or half glass should be given of weak tea, coffee, lemonade with or without wine, or weak diuretic decoctions (dan-

delion, licorice, cherry stems). To avoid fermentation these drinks should not be much sweetened; lactose can be used, on account of its diuretic action, instead of sugar. The patient should drink often, but little at a time and slowly. Robin gives, in addition to the above, a liter of chicken or veal broth in the twenty-four hours. Chantecesse prefers to give two or three tablespoonfuls of meat juice, the amount that can be squeezed from 200 gm. of chopped meat. The first solid food allowed is a light tapioca.—*The Journal of the American Medical Association.*

DEATH FOLLOWING THE STING BY A WASP.

Recently death occurred to an engine room artificer of Portsmouth, England, who had been stung by a wasp while sleeping on board his ship. The swelling of his neck was so great that he had to be sent to the Haslar Hospital, where he died on the following day. At the inquest, Surgeon Caldwell ascribed death to bacterial infection caused by the wasp's sting. The deceased was a healthy man, hence the virulence of the infection must have been extreme. A verdict of accidental death was rendered.—*The Practical Medicine.*

GOUT AND INFECTIOUS ARTHRITIS.

In two clinical lectures, in the *International Clinics* for June, Christian considers differential points between gout and acute and chronic arthritis. There are three types of gout:

First—Obvious depositions of urates in the bone or in the cartilage, or in both.

Second—In which that does not occur, but in which there are chronic arthritic changes, with exostoses and associated atrophy of the cartilage, etc. , sometimes with depositions of urates in the soft parts around the bone, adjacent to the bone, but not in the bone.

Third—Very little change in the joints, inflammatory change in the soft parts, but no obvious deposition of urates in the soft

parts about the joints or in the bones or cartilage. In all three types depositions of urates in the ears occur giving typical tophi that are easily recognized.

In regard to the value of uric acid metabolism studies, Christian points out that we are dealing with a substance which is present in the blood and in the urine in relatively very small quantities. Anything present in small quantities brings up the possibility of error in its determination. In the second place, we are dealing with a substance which in the blood is very difficult of quantitative determination, and there is still a question as to whether the methods available are satisfactory; or, to put it another way, other substances than uric acid may cause the same calorimetric changes which are used by Folin in his method of determining the uric acid.

In regard to the x-rays he states that we are justified in calling gout only those cases in which there is the typical punched-out area in the bones with thickening in the bony substance around the area.—*Henry A. Christian, M.D.*

INFLUENZA MENINGITIS.

Tobler speaks of the not infrequent association of suppurative meningitis with influenza. We do not as a rule know whether this complication is due to Pfeiffer's bacillus or one of the ordinary pyogenics. In seeking to throw light on this subject the author studied a case in great detail. The patient was an infant 5 months old with congenital syphilis. It passed safely through a sharp attack of influenza and then underwent an inunction cure. Some weeks after recovery from influenza meningeal symptoms suddenly appeared. Culture tests of the spinal punctuates were negative throughout but hemoculture yielded Pfeiffer's bacillus. Despite the threatening character of the meningeal sequela death occurred apparently from intercurrent acute peritonitis. Autopsy revealed purulent basal meningitis of base and convexity with an accumulation of pus in the peritoneal cavity along with ordinary adhesive peritonitis. In pus from both sources Pfeiffer's bacillus

was found under the microscope in advance of cultures. This case goes to reinforce a certain number of others on record, chiefly in young infants, in which the meningeal complication or sequela was evidently not due to mixed infection. In such cases the meningitis is doubtless not due to metastasis but to direct extension of the infection.—*Medical Record*.

SCARLET R IN CERTAIN DISEASES OF THE CONJUNCTIVA
AND CORNEA.

Writing in the *Indian Medical Gazette* for February, 1917, Kirkpatrick states that he has found the use of scarlet R to be so beneficial in atrophic conditions of the conjunctival and the corneal epithelium that he thinks it worth while to draw attention to its value.

Scarlet R has been recommended for use in corneal ulceration, but he has found it much more effective in xerotic conditions. Its use was first suggested to him by seeing it recommended by a writer in the *Journal of Laryngology* as a stimulant to the epithelium in atrophic rhinitis.

He first used it two years ago in the case of a woman who was suffering from a very severe exerosis of the conjunctiva and cornea which had followed on trachoma. The condition was a long-standing one, both corneæ were quite dry and insensitive, and the conjunctiva completely xerotic, with shrunken fornices. Vision was reduced to the perception of large objects near the face. Scarlet R in castor oil was dropped into her eyes daily, and in a short time Kirkpatrick was surprised at the improvement that took place. The conjunctiva softened and became more elastic, whilst the cornea became clearer and allowed watery solutions to spread over it. Eventually it was found possible to repair the fornices and she acquired useful vision.

He also found it most valuable in cases of the chronic pannus and superficial ulceration of the cornea which sometimes persists in trachoma after the conjunctiva has cicatrized.

The strength used has been from ten to forty grains to the ounce, according to the amount of reaction excited.—*The Therapeutic Gazette*.

OBSTETRICAL

A REVIEW OF ANESTHESIA IN OBSTETRICS.

In the *Long Island Medical Journal* for April, 1917, Polak and Matthews publish an exhaustive review of this subject and state that the following conclusions may be formulated:

1. It must be admitted that the ideal obstetric anesthesia has not been discovered.

2. The prolongation of the second stage of labor by any method is disastrous to the child, and this is particularly true of the morphine group of drugs.

3. Various combinations of the drugs at our disposal for the production of obstetric anesthesia have certain definite advantages, e.g., pantopon with scopolamine, or morphine with scopolamine to carry the patient through the preparatory stages, and when it seems necessary, chloroform, ether or nitrous oxide gas during the perineal stage.

4. At the present time, morphine-scopolamine anesthesia for the first stage and nitrous oxide gas for the second stage of labor, would seem to be the best combination.

5. From a study of this subject, it would seem that institutional obstetrics must be accepted as a recognized specialty, and that the judicious use of anesthesia, though not without its dangers, is destined to be classed among the obstetric arts.—*The Therapeutic Gazette*.

VACCINE AND SERUM TREATMENT OF PUERPERAL SEPTICEMIA.

Beruti concludes from his own experience and the published data, that antistreptococcus serotherapy in puerperal septicemia generally fails. He declares further that the intravenous route is irrational, as also large doses and attempts to use antistreptococcus serum in prophylaxis. Better results have been realized with nonspecific serotherapy. Normal horse serum has given excellent

results in the hands of Pouey and Turenne of Montevideo, among others. In one case the leukocytes rose from 4,500 to 25,000 under it, and in another case peritoneal septicemia retrogressed. Beruti has had a number of notable recoveries under intravenous injection of normal horse or beef serum, the single dose not over 20 c.c. It is his impression that the serum is more potent therapeutically when the animal has been previously bled. The effect is much the same as with the specific serums, but surpasses it. His conclusions as to specific vaccine therapy are that it has not sustained its promise. Vaccines made with other bacteria have proved unexpectedly effectual in the hands of some, especially in Argentina, with Enriquez, Kraus, Mazza and others, and Werner at Vienna has reported excellent results with a colon bacillus vaccine in puerperal fever. Beruti himself used an extract of colon bacilli, instead of a vaccine, applying it in a number of very serious cases of puerperal septicemia and with constantly unfavorable results. The intense reaction that followed the intravenous injection was unmistakably deleterious. In order to ascertain the physiologic bases for this heterotherapy, he experimented on dogs and rabbits. What he observed convinced him that there was something more involved in these formidable medicinal reactions than the mere action of albuminoids and colloids. But why they are so decidedly beneficial in some cases and so decidedly the reverse in others is still a mystery. It is like shaking a clock that has stopped; it may start it to going perfectly thereafter, or it may have no effect or an injurious one. Costa regards the reaction to nonspecific vaccine as a kind of anaphylactic shock, liable to do harm.—*The Journal of the Americal Medical Association.*

THE THERAPEUTIC USE OF THE EXTRACT OF CORPUS LUTEUM.

In the *Medical Record* of May 19, 1917, Happel states that in a case of headache following the menopause, due to insufficient internal secretion of the ovary, the extract of corpus luteum is a specific.

Extract of corpus luteum must be given over a long period of time and in sufficient dosage, according to the needs of the pa-

tient. It produces no toxic effect, except a feeling of fulness of the head or vertigo, and is not cumulative.

It is the best remedy for the relief of the nervous symptoms of the natural menopause, and for their prevention and relief in post-operative menopause.

It is of the greatest value in the treatment of irregular or scanty menstruation in young women and alleviates the neurasthenic symptoms so often associated.

It relieves dysmenorrhea in young girls and nulliparæ not due to a pathological lesion.

Benefit in nausea and vomiting of pregnancy has been reported.

The only disadvantage is the cost, which precludes its use in many cases in which it is strongly indicated.—*The Therapeutic Gazette*.

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M.D., corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

A CRITICAL SITUATION.

The government is raising an immense army of volunteers and conscripts to carry on the war to a successful and, we hope, an early termination.

Every army must be supplied with a personnel of medical officers of adequate number and well trained. While provisions have been made to raise the required number of men for the fighting force, it has been left to members of the medical profession of this country to come forward voluntarily, seeking commissions in the Medical Reserve Corps.

Only a few of the total number required have applied for commissions. This means that unless immediate action is taken by the profession voluntarily, the men in the army now being organized will be without sufficient medical care. Such a condition would be more than critical and dangerous for the success of our army and the cause in which we are enlisted. The medical officer plays a most prominent part not only in keeping the army on its feet and physically fit for fighting, but in returning to the ranks a large percentage of those who have been temporarily put out through casualties.

How soon will the medical profession of the United States as a whole wake up and realize that doctors must come forward and volunteer their services to the government?

In civil life, when great casualties occur, the doctor readily offers his services and usually is the first on the scene to save human life. How much more important is it, then, that in this critical situation, he should come forward and offer his valuable aid to preserve not only human lives, but the life of the nation itself?

Application blanks for commissions in the Medical Reserve Corps are being printed in many medical journals or will be sent to you by the Surgeon General's office, or can be secured from members of the local board of examiners.

If you are not acquainted with such a board, the editor of this Journal will be glad to advise you. One-fifth of the active profession of the United State is all that is required to supply the army now being raised. Be a part of the one-fifth.

RAPID GROWTH OF THE BIRTH REGISTRATION AREA.

Washington, D. C., September 12, 1917—Congratulations to Maryland, Virginia, and Kentucky, the latest states to be admitted to the Registration Area for Births by the Director of the Census, Sam L. Rogers.

The Registration Area for Births was established in 1915, and was then composed of ten states and the District of Columbia, representing 10 per cent of the territorial extent of the United States, but containing 31 per cent of the country's population. For this area the Bureau of the Census has recently issued its first annual report, entitled "Birth Statistics." As the area grows the annual reports will deal with the births in a constantly increasing portion of the country and will, therefore, become of constantly increasing interest and value.

The outlook for a very rapid growth of this Registration Area for Births is so good that a word of cheer to the states outside should be given. The need of complete birth registration is recognized now as never before. The age of the soldier must be known, and so a new argument for birth registration comes to the

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United States. Since war was declared tests of the completeness of birth registration have been made by special agents of the Census Bureau of Virginia and Kentucky, and both these states secured a rating of over 90 per cent, which represents the degree of completeness required for admission to the area.

Similar tests are now being made in Indiana and New Jersey, and before the year is over will be conducted in North Carolina, Ohio, Utah, and Wisconsin. Several other states are nearly ready to seek admission, and it is by no means a wild prediction that the Birth Registration Area within the next two years will be more than trebled in size, and will contain over two-thirds of the population of the United States.

One physician recently became so thoroughly aroused to the desirability of recording births that he reported to the local registrar 450 births which had occurred in this practice since 1900.

Parents and physicians everywhere are awakening to the importance of this matter and the fashion now is to register baby's birth.

The article on Epilepsy in this number of the Journal was written by Dr. C. L. Lewis many years ago and is presented to show the few changes that have taken place in the pathology and treatment of the disease since that time. It is an excellent sketch of the disease.

Nashville Journal of Medicine and Surgery, Nashville, Tenn.

GENTLEMEN—The American Association of Orificial Surgeons hold their annual meeting in Chicago at the Congress Hotel, September 27, 28 and 29.

The morning hours are devoted to surgical clinic at Fort Dearborn Hospital.

Notice of this meeting in your Journal will be greatly appreciated. I am,

Very fraternally yours,

B. A. BULLOCK.

LITTLE PURE ZINC OXIDE ON THE MARKET.

Washington, D. C.—Examinations made by the Bureau of Chemistry of the United States Department of Agriculture show that very little zinc oxide on the market in the United States complies with the standards of the U. S. Pharmacopoeia. Nearly all of the samples examined contained an excessive amount of lead. The samples were labeled "Not U. S. P.—Containing Small Quantities of Lead," and therefore complied with the Food and Drugs Act. The labels on the packages in most instances will probably come to the attention of the druggists, but not to the attention of physicians. The medical profession will therefore not be advised as to whether or not zinc oxide preparations are made from standard ingredients. Conditions may arise where a zinc oxide preparation contaminated with lead may do injury. A limited supply of U. S. P. zinc oxide is available and physicians may protect themselves and their patients from possible injury by calling for such material on their prescriptions.

STAND BEHIND OUR FIGHTING MEN.

America today is filled with young men of the country who wear their country's uniform and who have offered their lives to the service of their country. Every city, every town, every hamlet, every country community has some of its boys in the military uniform of their country. They are the very flower of our young manhood.

These are the men who are to go to the battle front. How effective they will be there, how safe they will be there depends on the support that their country gives them. The slower the United States is to exert its full power and put an end to the carnage in Europe the more of those Americans who are now in France and those who soon are to join them will suffer death and the greater number of American homes will be made desolate.

It is not to be believed that some national catastrophe, some calamity that will be shameful to us if it comes from lack of prep-

aration or from our failure to stand behind our soldiers, must occur to awaken our people to their duty.

The soldiers of the United States are standing by their country with a steady courage and devotion to duty that should inspire the Nation with pride and patriotism and loyalty. Some of them now are facing death for their people, are participating in the great battles in Europe to make the world safe for Democracy, to insure our own safety and to vindicate our honor. We who remain here in peace and safety must surely do our part.

The Liberty Loan of 1917 was authorized for the purpose of, and its proceeds are being spent in arming, equipping, supplying and caring for the soldiers of the United States and to assist our allies who are fighting by their side in France. In supporting the Liberty Loan the people of America are supporting our soldiers, and standing behind the men behind the guns. We should support our soldiers with all of our means, all of our resources, all of the combined might and power of the great nation that we are.

SUICIDE AMONG WAGE EARNERS AND THE GENERAL POPULATION COMPARED.

Among both white male and female policy-holders of the company, under 25 years of age, the suicide death rates are lower than those recorded among males and females in the general population of the Registration Area of the United States. For each age period after 25, the suicide rate of insured males is slightly higher than for the male population at large. White females insured in the company, however, show a lower rate than females in the general population throughout life.

If the suicide rates is an indication of the mental health of the people, it would appear from these figures that the housewives of the industrial families of the country are the best balanced of all. Their husbands are not quite so well favored.

INSURING OUR SOLDIERS AND SAILORS.

That a nation owes much to its citizens who have fought its battles and to their families when they have been killed or injured so as to destroy or impair their capacity to provide for their families has always been recognized by the United States. This just and generous policy of our country as administered under our pension system has been unduly costly and has not always been just. One of the proposed uses of the proceeds of the Liberty Loan is to give life and indemnity insurance to our soldiers and sailors and to provide allowances to their dependent families while they are in the ranks.

The plan worked out by Secretary of the Treasurer McAdoo and his coadjutors and approved by the President has been embodied in a bill which is now pending in Congress. As to the justness and righteousness of this insurance of our fighting men Secretary McAdoo says:

"Military service in the United States is obligatory; those who imperil themselves have no election. The insurance companies do not and can not permit this to affect their calculations. They must protect themselves by charging premiums so high that they are secured against loss no matter how severe the rate of mortality may be. Consequently the very men who are called into the service because their physical condition is of the best and who as civilians would for that reason be able to secure the most favorable insurance rate in peace time, are denied as soldiers the necessary life insurance to enable them to protect their families and dependents. The extra hazardous risks of war puts insurance entirely beyond the reach of the conscripted soldier.

"The government which subjects these men to this insurmountable discrimination should itself supply insurance to soldiers at cost and upon the peace basis. It would in fact be dastardly and undemocratic if the government should penalize the soldier who is forced to render the highest duty of the citizen, by failing to provide for him war insurance upon peace terms and at net cost. The pay of the enlisted men in the Army and Navy is less than

the wages and salaries generally earned in private life and government insurance is an essential war and emergency measure inaugurated for the specific benefit of our military forces and can not be conducted for profit.

"This legislation will be a great step forward in the recognition of the Republic's duty to its heroes. It deserves earnest and vigorous support of the country. The United States should set the highest example of all the nations in the treatment of those who do and die for their country and for world freedom."

Reviews and Book Notices

Handbook of Gynecology for Students and Practitioners—By Henry Foster Lewis, A.B., M.D., Professor and Head of Department of Obstetrics and Gynecology in Loyola University School of Medicine; Chief of Obstetric Staff of Cook County Hospital; Fellow and Ex-President of the Chicago Gynecological Society; Late Assistant Professor of Obstetrics and Gynecology in Rush Medical College (in affiliation with the University of Chicago), and Alfred de Roulet, B.Sc., M.D., Professor of Gynecology in Loyola University School of Medicine; Attending Gynecologist to the Home of the Good Shepherd and to St. Bernard's Hospital; Obstetrician and Chief of Staff of St. Margaret's Home and Hospital. With One Hundred and Twenty-seven Illustrations. St. Louis. C. V. Mosby Company. 1917.

In the examination of this new claimant for professional favor we have been struck with the essentially practical character of the work. It is excellently adapted to the needs of the student and will prove a great help to the young practitioner. The arrangement is unusual—out of the line generally adopted by text-books—but systematic and logical. The illustrations are numerous and good. Operative technique is presented briefly but clearly and concisely. The authors rightly claim that technique can be acquired only by hospital work, not by text-book descriptions. All in all the book is a valuable contribution to medical literature and should be well received.

Practical Materia Medica and Prescription Writing, with Illustrations by Oscar W. Bethea, M.D., Ph.G., F. C. S.; Assistant Professor of Materia Medica and Instructor in Prescription Writing, Tulane University of Louisiana, Formerly Professor of Chemistry and Professor of Pharmacology, Mississippi Medical College, etc. Second Revised Edition. Philadelphia. F. A. Davis Company, Publishers. English Depot, Stanley Phillips, London. 1917.

We are indebted to the obliging publishers of this useful work for a copy of the second edition, enlarged and rewritten. As a text-book of materia medica for the daily use of practitioner and student it is a carefully prepared compend covering the entire field of materia medica and pharmacology in a practical and concise manner. An especially valuable portion of the work is part third, devoted to the art of writing prescriptions, an art some-

what neglected by the majority of physicians. In this part fifty prescriptions are arranged illustrating common errors of prescription writing as compared with the same prescription correctly formulated. These have been selected from thousands of prescriptions and the idea is not only to point out errors, but to give formula of therapeutic merit. We regard the work as of real value and do not hesitate to recommend it to student and practitioner.

Publisher's Department

IN PRURITUS.

Even in severe forms of genital, anal, diabetic, eczematous itching, K-Y Lubricating Jelly in a great majority of cases, will bring relief, or at least grateful alleviation.

To anoint the skin in these conditions, K-Y Lubricating Jelly is not only effective, but convenient and economical, since it can be used without staining or soiling the bed clothes or the patient's linen. If the part is washed before each application, the best results are obtained.

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K-Y ANALGESIC has the obvious advantage over the hot water bottle in that "it stays put" for a much greater period of time. Nor is there the possible danger of a hot water bottle burn—a factor especially to be thought of where the neuritis patient is weak and infirm.

"Paraldehyd" possesses many of the good without the evil qualities of chloral. Used in Insomnia resulting from various causes. The objectionable taste of the chemical is, to a great extent, disguised in Rob-inson's Elixir Paralydehyd (see advertisement in this issue) which is an elegant preparation.

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of what that judgment will be, for it has been shown beyond all possible question that this efficient therapeutic agent has no superior in its field of use.

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THE CEREBRAL IRRITATION OF TYPHOID.

One of the most important symptoms of typhoid fever is the cerebral irritation caused by the infection. The patient is already weakened through the severe infection and it is necessary to choose a cerebral sedative that will calm the patient and at the same time be free from a depressing influence on the heart.

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PREVENTION OF BRONCHIAL AND PULMONARY INFECTIONS.

The value of cod liver oil as a means of guarding against bronchial and pulmonary infections by raising the index of resistance of the concerned tissues, is well appreciated by the profession, and many physicians advise the systematic use of Cord. Ext. Ol. Morrhuæ Comp. (Hagee) for this purpose. It would appear that cod liver oil has a definite predilection for the tissues of the lungs and bronchi and adds materially to their powers of resistance against germ invasion. That this increase of resisting power means a diminution of susceptibility to colds and their consequences is very evident and points plainly to the need for a cod liver oil preparation, such as Cord. Ext. Ol. Morrhuæ Comp. (Hagee) in those persons with the slightest susceptibility to bronchial and pulmonary infections. The superior feature of Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is its palatability which in no wise impairs its therapeutic efficacy.

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W. T. BRIGGS, B.A., M.D., Associate Editor.

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Original Communications

SOME EFFECTS OF INEBRIETY ON THE TEETH AND JAWS.

BY T. D. CROTHERS, M.D.,

Supt. Walnut Lodge Hospital, Hartford, Conn.

Some years ago through the courtesy of Dr. Talbot my attention was called to the degenerations of the teeth and jaws in persons who had used spirits and drugs to excess. General marks of degeneration, seen in the head and face and other parts of the body, have been commonly noted in inebriates but we owe to Dr. Talbot the credit of showing that certain of these defects were traceable to spirit and drug taking, both as an active and predisposing cause.

My work for forty years has been almost exclusively confined to the study of inebriates from spirit and drug taking. This has given me an opportunity to note many facts along these lines and confirm and verify the statements of others. In an analysis of the histories of a large number of inebriates, at least seventy per cent will be found to inherit from their ancestors neurotic defects and faults of vitality and nutrition. The remaining thirty per cent

are traceable to injuries, diseases, bad nutrition and environment. The first class show marks of this neurotic heredity in defects of the body and deficient vitality. The second class are more prominent in general symptoms of anæmia, starvation and poisoning.

The brain, nervous system and functional activities reflect these conditions in many ways. Thus in the inherited class the head, face, teeth and maxillaries all show degrees of symmetry which point to irregular and retarded growth and faults of nutrition.

In the acquired class the faults of nutrition with irregular control and feeble brain function and vigor are prominent.

The direct action of spirits on the mouth and teeth is due in some degree to the rapid water absorbing qualities of alcohol. Alcohol on the surface absorbs the moisture so rapidly that it becomes an irritant corrugating the tissue. In the mouth, it has the same effect which is neutralized in a measure by the excessive salivary discharge.

It has been noted that spirit and beer drinkers who take small quantities of spirits, sipping them over long periods of time have defective teeth and gums while others who drink spirits with large quantities of water, swallowing them rapidly, do not suffer so much. Persons who use beer and spirits to gratify the sense of taste and enjoy the flavors, always suffer from degeneration of the mucous membrane, gums and teeth. Often such defects are unnoticed until the spirits and drugs are removed and the anesthetic condition which has existed passes away, then the exposed nerves and crumbling teeth call for help.

The use of alcohol produces vaso-motor paralysis by which the circulation of the blood is retarded and deranged. The nutrition of tissue and cell is lowered and impoverished. Added to this there is an increase of toxins with leukocytes and deficient power of elimination; hence both starvation and poisoning follow. The terminal arterioles are deranged and the cells and dentrites suffer from defective nutrition from the toxins.

I think that the same process takes place in the terminal nerves of the teeth and gums that is noted in the nerves of the extremities in neuritis. There is without doubt a very close association be-

tween neuritis and dental degeneration, and in my experience they frequently follow each other.

Spirit and drug takers who complain of so-called rheumatism, particular pain, stiffness of the joints and defective locomotion have neuritis and toxæmic states affecting the cell and dentrites at the extremities. The crumbling teeth and shrunken gums is another symptom of what appears to be the same pathological process of acute nerve poisoning.

The toxin of syphilis shows itself often in the faulty growth and condition of the teeth and gums. Lead and other poisons are manifest in the same way. The profesesion is not aware that alcohol is a toxæmic in its effects on nutrition, and it is only recently that we are confronted with the evidence that alcohol is cumulative in its effects.

The steady use of spirits even in small doses, such as wine at meals taken with the utmost regularity for a long time, is a source of degeneration that is as clearly traceable as that of syphilis. In physics the continual tapping by a hammer on the hardest steel will after a time break up its tenacity and cohesiveness, causing it to crumble like chalk. In like manner the continued use of a dose of spirits acting on the vaso-motor centers, deranging circulation and nutrition, increasing the toxins and diminishing the power of elimination produces permanent erosions and degenerations of cells and tissues. Fibrinous deposits and sclerosis of the nerves and tissue are always present in such cases. Metabolism and vitality are slowly and surely destroyed and this condition is transmitted to the next generation, appearing in convulsive degenerations, recurrent insanities and morbid impulses for spirits and drugs.

So-called moderate drinkers who imagine that their temperate use of spirits was a virtue with increased enjoyment of life have in reality crippled and destroyed the next generation by transmitting to them defects that are continuous evidence of the degeneration from the use of spirits.

Dentists as well as physicians are constantly confronted with these evidences of the failure of parents to transmit to the next generation normal vigor and vitality. If associated with the use

of spirits either in excess or moderation, there is hyper-nutrition; the toxæmic conditions are very greatly increased and this is seen in the teeth and mouth.

Formerly unthinking physicians prescribed alcohol and drugs as remedies which covered up this condition. Often persons who have local inflammation of the dental nerves find that spirits and drugs give temporary relief and very soon continue its use and become habitues. The defects of the teeth become intensified and finally they are removed as a remedy.

Many persons believe that the local inflammation of the gums and teeth was the active cause of the drug addiction. Cocaine taking is frequently contracted by the use of this drug for the defects on the gums. Other drug addictions may spring from the same cause, but it is evident that the localized effect on the teeth and gums point to the same grave condition affecting the entire body and that spirit and drug taking are only culminations of degenerations beginning long before.

Morphia takers always have defective teeth and a general marasmic condition of the mouth. The continued anesthesia of the sensory centres not only increases the degeneration but covers up all evidences of it. In some of the opium addictions there is great hyperesthesia of the gums and teeth; in others marked anesthesia appears. In most of the persons I see who use this drug to excess, the active degeneration goes on in the mouth without any recognition of it, but the moment the drug is removed the condition becomes intensified and very prominent. Occasionally teeth that are sound become the center of extreme pain. The entire dental nerve and its branches seem to be in a condition of acute inflammation and even after the teeth have been removed obstinate neuralgias continue. A sudden acute localized inflammation of the dental nerves should be regarded as neuritis with distinct causes, prominent of which are alcohol and narcotics, also lead and mercury. I have met a few persons whose morphinism developed an acute hyperesthesia of the maxillary nerves. Every effort to remove the drug was followed by a return of the pain and suffering until finally the case became chronic and all treatment was abandoned. I have seen two such cases who are comfortable while

using morphia but the removal brought on the most aggravating suffering. In one instance reported to me where the morphia had been removed, a surgical operation was resorted to and the nerve severed but the pain continued. The removal of the teeth does not always check the pain. The nerve becomes permanently disorganized.

It is an interesting question in the study of the causes to know how far alcohol or other narcotics have had primary or secondary effects on the teeth and gums. Where dental defects existed before drug taking some constitutional condition existed usually manifest in that way. Some very unusual cases have come under my observation where profound shocks and derangements of nutrition have resulted in inflammation and erosion of the teeth. The following is an example:

A business man, aged 45, temperate, with no heredity, was made unconscious by a lightening stroke in his immediate vicinity. Invalidism without any distinct symptoms lasted for two months, then suddenly he began to use spirits to great excess and came under my care. In a short time the craze disappeared entirely, then acute maxillary inflammation began extending to every tooth of the mouth. There was no evidence of decay, only extreme hyperesthesia of the gums and tenderness of the teeth. All local and general treatment failed and he went under the care of a nerve specialist. A year later he returned as a morphia taker. His teeth had all been removed but the pain along the maxillary continued except when under the narcotism of morphia.

A second example was a similar temperate business man in good health up to the death of his wife from an accident. A few weeks later acute inflammation of the teeth and gums, with great sensitiveness to heat and cold in the mouth, came on. Active treatment by a dentist, with the removal of the teeth, was followed by improvement. He then became an alcoholic inebriate. Under my care he was treated with electricity and recovered both from degeneration of the mouth and the use of spirits.

There was probably in these cases some profound toxæmic condition associated with the psychical shocks in both cases which localized in the maxillaries. I have the histories of several per-

sons who before all use of spirits and drugs had a prolonged period of dental troubles in which nearly every tooth was filled and later they all broke down.

The history of specific taints with salivation from mercury and loss of teeth, then spirit and drug taking are very common. In some persons, forms of neuronic exhaustion precede the breaking down of the teeth, then comes spirit and drug taking as a local and general remedy.

A very interesting question is frequently asked concerning the effects of tobacco on the teeth and jaws. Evidently cigarette smoking is the most marked form of tobacco that appears to have its specific effect in the mouth, and persons who urge the antiseptic action of tobacco find it very difficult to substantiate their claims from any data known at present. Another interesting fact probably has some influence in this direction, although it cannot be very clearly made out. Thus the perversion and diminution or obliteration of the sense of taste follows the use of spirits. Such persons show abnormal impulses and crave for acids, sugars, salts, and irritant condiments which influence the nerve terminals of the teeth and the mucous membrane of the mouth and its nutrition. The obliteration of the sense of smell is another factor encouraging localization of acute degeneration of the teeth and gums, or the liver and kidneys.

I think that it can be clearly established that alcohol taken to great excess, either continuously or at intervals, has a profound influence on the teeth and gums. In paroxysms followed by a distinct free interval in which the anesthetic effects pass away and a degree of restoration follows, the effects are less prominent. In the continuous use, as before mentioned, the nutrition and vigor of the teeth are always seriously impaired. Of course, there are certain distinct pathologic conditions which may concentrate and produce more serious effects in some particular organ of the body and the teeth and gums may be one of these locations. The mucous membrane of the nose and throat is another. The liver and heart are also among the organs that register these special effects. Occasionally drug and spirit takers exhibit great fragility of the osseous system associated with degenerate teeth.

This is probably owing to some faults in the diet with absence of proper mineral matter and nutrition.

An observation made by the late Dr. Wright some years ago, has been amply confirmed by my studies; namely, that when syphilis and alcoholism are combined, degeneration of the teeth and maxillaries is a very common sequella. Both of these diseases are toxic and the teeth and jaws should always be examined for evidence of their influence.

Another observation has been confirmed in many ways and is this: In certain families, notably those who began with alcohol degeneracy, a marked persistence of diseases of the teeth and jaws are noted, extending through two or more generations and appearing in every member of the family. I have seen two incidents of this in which a great grandfather who was an inebriate was followed by a numerous family, all of whom had defective and diseased teeth in early and middle life. This degeneration continued into the next generation and was most marked. There were only three inebriates in a family of twenty-six, but every one had degenerate teeth.

I have been told that this form of degeneration is sometimes seen in syphilitic inheritance and no doubt this is true.

I conclude these observations with a general summary. (1) Spirit and drug taking is a very potent cause of defective teeth and gums. It may be stated that a large percentage of degeneration which localize in the teeth and gums may be the exciting causes of spirit and drug taking. The increasing prevalence and demand for narcotic drugs indicates low vitality of which the vigor of the teeth is a prominent part, and lastly a study and correction of the injuries or beginnings of diseases in the mouth may be the removal and prevention of serious drug neurosis which may follow.

Selected Articles

HEART FAILURE TREATED BY MASSAGE OF THE HEART.

The readers of the Therapeutic Gazette will recall that on a previous occasion we drew attention to this subject and pointed out that the term massage of the heart was applied to several widely different procedures. Some have applied it to massage or kneading of the precordium, with probably no direct effect upon the heart, but only a reflex irritation. Others have practiced so-called massage of the heart through the diaphragm during the performance of an abdominal operation when cardiac arrest was threatened, and still others have gone so far, in desperate cases, as to incise the diaphragm, pass the hand through the opening, and directly massage the heart. In the cases to which we referred in an earlier editorial there seemed to be no question that such measures served to restore cardiac action. Whether the more radical method last cited is not so grave as to be virtually death-dealing in itself is a question for debate, although reports show that, temporarily at least, the action of the heart is re-established or improved.

For these reasons we have noted with interest an article by Molyneux in the *British Medical Journal* of March 31, 1917, in which he emphasized the interest which has been taken of late in heart massage, when the massage was applied through the diaphragm in a patient undergoing operation. He is also familiar with the fact that, when the patient has collapsed on the operating table and has failed to respond to the ordinary stimuli, massage through the diaphragm has been practiced with advantage. He advocates, however, not permitting undue delay, thinking that desperate conditions should be met by desperate measures, and he is so confident of the value of the method that he even discusses its employment in collapse complicating operation for adenoids.

Recognizing that the surgeon's hands are not sterile and that he might not have suitable instruments at hand for abdominal section, he nevertheless urges that delay may mean the loss of life and that the chance is worth taking.

He states that every case of death on the operating table that has come to his knowledge has been employed, and that it is very rare to hear of a death under ether, an observation which is in accord with that of the entire profession, and which is the more interesting since in chloroform poisoning the heart is often widely distended and fibrillating, and therefore can be reasonably expected to re-establish its contractions if by gentle compression its cavities can be emptied.

The cases cited by Molyneux are as follows:

A woman of sixty-three was sufficiently optimistic to believe that the enlargement of her abdomen might mean her first pregnancy, but the examination showed an ovarian tumor of great size impeding respiration. Indeed, Molyneux describes the patient as a shell surrounding a tumor, so large was the growth. The pulse was irregular, the arteries thickened, and there was a marked aortic systolic murmur. On opening the abdomen the tumor was removed, after having been aspirated, and the patient immediately collapsed, the respiration and heart both stopping. Artificial respiration and pituitary extract were without effect. The right hand was introduced into the abdominal incision, the left hand placed over the heart, and the heart massaged by a series of rhythmic squeezes at the rate of forty or fifty a minute, the right hand pressing the heart through the diaphragm against the chest wall, this being re-inforced by pressure on the outside of the chest by the left hand. Molyneux states that after a short time the heart commenced to beat, circulation was restored, and the patient made a rapid recovery. Notwithstanding his previous observation in regard to the danger of chloroform, ether was the anesthetic in this case. He believes, and probably correctly, that the ecollapse was due to sudden relief of intra-abdominal pressure, the tumor being so large that it took two people to lift it off the table.

His second case was that of a man with appendicitis, whose age is not given. As soon as the abdomen was opened collapse occurred. The incision was rapidly enlarged, and the right hand introduced to the diaphragm and the heart felt as an absolutely flabby organ without contraction. Massage of the heart and artificial respiration were at once commenced. After about one minute the massage was stopped, but the heart, at the end of the second minute, began to beat feebly. Pituitary extract and strychnine were injected, and after about five minutes the patient's condition improved so much that it was decided to complete the operation, as the appendix was distended with pus. The patient survived the operation, was sustained by continuous enteroclysis of normal saline containing adrenalin, and made a good recovery. In this case the anesthetic used was a mixture of chloroform and ether before the collapse and ether subsequently.

Further information in regard to this matter is given us in a report made by Mollison in the *British Journal of Children's Diseases* for January to March, 1917. Mollison is Surgeon to the Ear and Throat Department of Guy's Hospital, London, and reports the case of a boy of six years, slightly built, but healthy in appearance, who had a history of having had on a previous occasion bronchitis and asthma, and from whom it was considered desirable to remove the tonsils and adenoids. They prepared him in the usual way for an anesthetic, a purge being given on the day before the operation and a cup of milk at 8 a.m. on the morning of the operation. A mixture of chloroform, two parts, and ether, three parts, was administered on an open mask. The patient passed speedily into unconsciousness and the corneal reflex was never lost. The left tonsil was removed successfully, but while the right was being removed the boy struggled slightly. He was then turned on the side and the adenoids curetted. The boy did not react properly, but was found to be flaccid, respiration ceased, the pupils were dilated, and the corneal reflexes absent. The head was lowered, the throat cleared, the tongue pulled forward, and artificial respiration by Sylvester's method instituted. Although the air entered the chest quite freely, the patient's bad color persisted. Stimulants were administered, hot cloths were

applied to the chest and abdomen, brandy and ether were injected subcutaneously, 0.5 Cc. of pituitrin injected subcutaneously, and another 0.5 Cc. of pituitrin was injected through the chest-wall into the heart. No response followed. No heart sounds could be heard. The abdominal walls were washed with ether and an incision four inches long was made through the ensiform cartilage to just above the umbilicus in the middle line, but there was no bleeding from the sides of the incision. The liver, which was incidentally cut, failed to bleed. The right hand was introduced into the belly to feel the heart, with no trace of movement. With the left hand on the chest wall and the fingers of the right hand behind the heart, pressure was exerted at the rate of about ninety times per minute. The boy's color improved and his pupils contracted, but there was no attempt at heart contraction. After a time the operator became tired, and an assistant continued to massage the heart, Mollison injecting nearly 1 cc. of pituitrin into the heart, guiding the needle through the chest-wall between the fingers of the right hand.

Massage was now renewed, and after about twenty more squeezes the heart suddenly began beating strongly. As soon as it was certain that the heart was beating well, the liver was sutured and the abdominal incision closed. It was estimated that the heart had ceased beating fifteen or twenty minutes before its action was re-established. The whole incident lasted from 1 p. m., when the operation began, until 1.35 p.m., when the boy was returned to the ward. On his return to the ward saline infusions were given and the foot of the bed raised considerably. An hour later the patient became restless, his limbs were rigid, with choreic movements, and the intestines escaped from the wound, requiring their replacing and new suturing. The boy remained more or less unconscious for a period of seven days, and for some days had a meningitic cry, which on one occasion was almost continuous for thirty-six hours; he nevertheless finally began to improve, and seventeen days after the operation he could sit up, but still had incontinence of urine. He eventually made a perfect recovery and left the hospital about six weeks after the operation.—*The Therapeutic Gazette*.

Extracts from Home and Foreign Journals

SURGICAL

EXPERIENCES IN RECONSTRUCTION SURGERY OF THE EXTREMITIES.

In the September *International Clinics* Babcock calls attention to the needless sacrifice which is often made of extremities, especially the hands, which can be restored to a fair degree of usefulness by conservative surgery. The article is very profusely illustrated. He goes into considerable detail in showing how a badly injured limb may be saved, either partially or completely. The article which does not lend itself readily to condensation, should be consulted by all interested in surgery. It is especially valuable for those entering the military service where many of the problems it deals with will be encountered frequently.

SARCOMA OF THE RECTUM.

This is a very rare condition, but when it does occur, the growth arises in the connective tissue around the bowel, though it is very difficult to say in which particular element of the connective tissue the growth started. The sarcoma may arise in the pelvic fascia and secondarily invade the bowel; again it arises from the pelvic bones. However, sarcoma proper of the bowel arises in the submucous connective tissue and grows out into the lumen of the bowel, lifting the mucous membrane before it so that the early signs, pus and blood, of carcinoma appear very late in sarcoma. When once fairly started or irritated, the sarcoma grows very rapidly.

In a case seen lately by the writer, the patient, a woman, noticed a lump just within the anal opening. It enlarged rapidly bringing her to the doctor. The lump was three months ago in-

side the anus, now there was a nodule the size of a marble protruding. It seemed to arise at the anorectal junction, was beneath the mucous membrane and extended anteriorly between the bowel and vagina, and laterally into the left ischio-rectal fossa. When first seen it was smooth, non-pedunculated, firm, and appeared to be a fibroma. The irritation due to the protrusion of the tumor through the sphincter, however, caused such an increase in the rapidity of the tumor's growth that at operation a week later, it was half again as large and had begun to ulcerate. Microscopical examination showed it to be a small round-celled sarcoma, the most malignant type, as shown in this case by recurrence three weeks after operation.—*Pacific Medical Journal*.

DANGERS OF TONSILLECTOMY.

A news item following the death of Mr. Henry Field is expressed in these words: "Mr. Field had been ill in the Presbyterian Hospital for the last two months. He first submitted to an operation for the removal of his tonsils and later an abscess of the lung was discovered." Putting two and two together the assumption that the lung abscess was a result of the tonsil operation, seems not unreasonable.

Recent medical literature shows this accident to have occurred repeatedly under similar conditions. Tonsillectomy, or the complete removal of the tonsils, as distinguished from less dangerous, less radical, and less fashionable tonsil operations, is a modern stunt. It is quite justified in exceptional cases. But the orgy into which it has degenerated within recent years, is little short of criminal. It is a dangerous operation. Serious hemorrhages are of daily occurrence. The rapid development of tuberculosis through liberation of tubercle bacilli into the blood stream after tonsillectomy has been frequently noted. Instead of curing some rheumatics, their ailment has been lashed into furious activity.

The medical press has repeatedly issued warnings of caution. To call attention to the situation in the public press seems to me, therefore, neither untimely nor indiscreet. On the contrary, I con-

sider it a public duty. A generation ago one of the popular operations among gynecologists was Battey's operation, or the "removal of the ovaries in order to eliminate their physiological influence" (Gould's Dictionary of Medicine). Women were spayed on the slightest provocation. No surgeon of today would dare expose himself to the contumely and derision which would pursue him at the performance of that one-time elegant and remunerative feat. So will it also be when the debauch of the indiscriminate butchery of the tonsils will have run its course.—*Medical Review of Reviews*.

THE TREATMENT OF WOUNDS OF THE KNEE-JOINT.

I. S. Novis (*Lancet*, July 7, 1917), in the treatment of wounds of the knee-joint, lays stress on the necessity for free drainage of the posterior pouches. If this is done at a reasonably early stage, the large majority of cases will recover with a useful limb and many will recover with a fair range of movement. Complete ankylosis will by no means necessarily follow. Novis is convinced that too extended a trial of milder methods of treatment has led to the loss of many limbs and lives which might have been saved, had free drainage been established earlier. Moreover, free incisions into the posterior pouches will do all that can be hoped for from freely opening up the joint by cutting through the ligamentum patellæ and other ligaments and will leave an infinitely more useful limb.—*International Journal of Surgery*.

RESULTS OF SURGICAL TREATMENT OF GASTRIC ULCER.

Balfour (*Surgery, Gynecology and Obstetrics*, June, 1917), basing his conclusions upon 677 gastric ulcers operatively demonstrated in the Mayo clinic during the past ten years, emphasizes the following facts:

For ulcers at the pylorus, posterior gastroenterostomy is the operation of choice in the poor surgical risk, for although pylorotomy is followed by better results, the operative mortality is dis-

tinctly higher. The cautery is a useful adjunct in selected cases.

For ulcers on the lesser curvature, cautery by the method described in a previous paper and gastroenterostomy is the operation of choice.

Local excision alone of such ulcers is inadequate, 32 per cent of patients so operated on requiring further operative treatment, viz., gastroenterostomy.

Sleeve or segmental resection, especially in large high ulcers and hour-glass contraction, in suitable cases is not only a relatively safe operation but has been followed by good results.

The lowest operative mortality in the more common operations was associated with cautery and posterior gastroenterostomy.

Ulcers on the posterior wall are associated with the highest operative risk, while those at the pylorus are of least risk.—*The Therapeutic Gazette*.

INTESTINAL OBSTRUCTION.

The correctness of the views held by eminent surgeons is emphasized by Jackson. It is evident that surgical relief of obstruction is the only final salvation for life, and should be instituted early before the patient has already absorbed a lethal dose of poison. Delay is only excusable then for practically all acute abdominal crises which may in any way simulate obstruction are themselves likewise surgical conditions. The only excuse for the responsible physician is the refusal of patient to accept his advice. The lost body fluid should be replaced by proctoclysis and hypodermoclysis, both before and after operation. Thus fluids are replaced, toxins diluted, elimination increased and acidosis neutralized. Jackson favors the direct surgical drainage of the high intestinal area, advocated by McKenna. The principle is, a quick enterostomy high in the jejunum as the sole primary operation. Six to eight weeks later, with the patient in good condition, the obstructed and damaged area is successfully resected.—*Journal of the American Medical Asso.*

MEDICAL

GOITRE.

An Analysis of 125 cases with a Note on the Treatment, by Leigh F. Watson, M.D., Chicago.

The author reviews the records of 25 goitre patients considering the cause, age at onset, and effect of previous operations in certain cases. He illustrates by tables and degree of enlargement, and reports the results following quinin and urea injection.

In 43 per cent no exciting cause could be elicited; in the remaining 57 per cent the onset could be ascribed to a definite exciting cause. Of the 125 cases, 15 per cent was caused by worry; parturition was responsible for 11 per cent, and in 9 per cent the condition was due to puberty. Twenty per cent gave a family history of goitre and 11 per cent of nervousness; 19 per cent had had tonsilitis. Forty-five per cent of the exophthalmic patients first noted the goitre eight years before examination at the average age of 34 years, and the symptoms developed at the age of 40. Fifty per cent gave a history of acute onset, two years before coming under observation at the average age of 29 years. Sixty per cent of the nonexophthalmic patients observed that they developed more marked symptoms of intoxication as the goitre became more chronic.

Before coming under treatment, five ophthalmic patients had had ligation of the superior thyroid arteries with temporary relief; four had had partial thyroidectomies without permanent benefit; three had had pelvic operations without lessening the hyperthyroidism; the condition of one was aggravated by a pan-hysterectomy; and one had had a tonsillectomy six months before without influencing the severity of the exophthalmic symptoms. Enlargement usually begins in the right lobe, sometimes in the isthmus and least frequently in the left lobe. In 95 per cent of the exophthalmic patients of this group both lobes and isthmus were involved before the goitre became exophthalmic. A majority

of the patients noticed increasing symptoms of intoxication as the goitre became more chronic, gradually involving both lobes and isthmus. Eighteen per cent of the mildly toxic patients became exophthalmic after an average period of five years. This study indicates that both nontoxic and toxic goitre occur later in life in nongoitrous localities than in sections where the disease is more prevalent.

The following tables show the results after quinin and urea injections:

Effect of the Injection on Symptoms—

	Relieved	Imp.	Not Imp.
Exophthalmic -----	85 (aver. 4 mos.)	15	0
Nonexophthalmic -----	84 (aver. 2 mos.)	10	6

Effect of the Injections on Goitre—

	Cured	Reduced	Not Red.
Exophthalmic -----	80 (aver. 4 mos.)	15	5
Nonexophthalmic -----	75 (aver. 4 mos.)	12	13

Two patients suffering with severe toxic goitre with exophthalmos of several years duration received only slight benefit; later a lobectomy was done without additional relief. Four exophthalmic patients were pregnant two to four months. Relief from hyperthyroidism followed the injection and they went to term without recurrence and had normal deliveries. The number of patients cured is highest in the group of those who came for treatment early in the disease; the benefit received by those who came later was in proportion to the degree of damage done the circulatory and nervous systems. A goitre that had once disappeared has never recurred. A majority of the patients in this group have been under observation for two to four years. The quinin and urea injection has limitations the same as any other treatment for goitre and can be employed only in selected cases. The treatment of the exophthalmic type in young adults is very difficult, and should be attempted only under the most favorable circumstances. If the best results are to be secured, hyperthyroidal patients must have at least a year of mental and physical rest after treatment.—*New York Medical Journal.*

FUNCTIONAL TESTS IN CHRONIC NEPHRITIS.

Christian discussed in the *International Clinics* the various tests to determine the functional capacity of the kidney, normally the phthalien output, blood urea, nitrogen, index of urea, excretion and specific gravity of urine.

The last mentioned is a simple means of determining the functional cavity of the kidney. The kidney normally accommodates itself to different kinds of urea complexes by excreting a more or less concentrated urine, a urine which pretty closely parallels the fluid intake. If, however, the kidney is injured it does not accommodate itself so promptly that curves representing the specific gravity taken every two hours instead of showing marked variations flatten out in proportion as the kidney is diseased.

Christian believes that the functional tests are useful in determining prognosis, and, to a certain extent treatment, and in some cases diagnosis, when there is a question of early nephritis, but they are mainly helpful from the point of view of prognosis.

HEART MURMURS.

Laubry's remarks are addressed to the practitioner, not the specialist. He reiterates that the special moment during the heart cycle at which the murmur appears, and its duration, are the main points for estimation of its clinical significance. The important thing is to locate the murmur in time rather than in space; its seat is of less moment. Vaquez declares that the heart should never be examined first with the stethoscope; this should be reserved till later to determine the exact point where the murmur sounds loudest. The first phase should be determined not by the pulse but by the tactile sensation of the apex beat which accompanies the sound. When a diastolic murmur commences with the second phase or immediately afterward, finishes immediately before the first phase, and fills the whole of the long pause, it is always organic, it occurs only with aortic insufficiency, the sound is a rumbling, not a murmur. When the murmur occupies the entire systole, commencing with the first phase and stopping with

the second, it is always a sign of valvular disease, but if there is even a brief space free from it at the middle or end of the short pause, then the murmur can be recognized as not only inorganic but it can be located outside of the heart, in the precardiac sheet of the lung. If the free interval is at the beginning of the short pause, then it may be organic notwithstanding the integrity of the first sound. A murmur of inorganic origin may be encountered with tachycardia, in which case exact localization in time is out of the question. The site of the murmur is of little importance with a diastolic murmur but is important with the systolic. In the region of the base and of the middle of the heart, at about the third interspace and the fourth rib, every dubious murmur not decidedly filling the entire pause may be regarded as inorganic, as also every murmur at the base not followed by a diastolic murmur. In the apex region, if there is any doubt, prolonged response, influence of change of position or of pressure on the eyeball may modify conditions so that the murmur may be better understood. Of course the above applies only to dubious murmurs. With actual organic disease there is no chance for doubt. The practitioner should practice to locate the murmur at its special point in the time cycle. When certain of this, he can fit the knowledge thus gained into the whole train of symptoms and the history of the case, and all may become clear. The murmur symptom should be analyzed first of all.—*The Journal of the Am. Med. Asso.*

OBSTETRICAL

STATUS EPILEPTICUS IN THE PREGNANT.

Albeck's experience has convinced him that status epilepticus in pregnant or parturient women is not so exceptional as would appear from the records, but it is often mistaken for eclampsia. Differentiation is particularly difficult when the epileptic seizures are accompanied by albuminuria and edema, as in his three cases. The fact that the patient is known to be an epileptic or that the convulsions have recurred at previous pregnancies, speaks for the

epileptic nature of the trouble, as eclampsia, he says, as good as never occurs twice in the same individual. The blood pressure may also aid in differentiation; a normal or nearly normal blood pressure is not found in eclampsia. In five cases on record of status epilepticus in pregnant or parturient women all terminated fatally, but Jardine has reported a case at the eight month and the woman recovered after cesarean section. Albeck systematically interrupted the pregnancy in his three cases, by instrumental dilatation or cesarean section, and all the women recovered. He thinks that a latent or frank tendency to epilepsy is roused by some pregnancy intoxication. He has had 151 cases of what he calls eclampsisms among 3,000 pregnant women; in one case it was pronounced in an epileptic woman for a few weeks before delivery but yet status epilepticus did not develop, and a living child was delivered by section at term. This patient had been given potassium bromid regularly from the first symptoms. None of the women thus treated developed status epilepticus, but when it was already installed, he did not venture to allow the pregnancy to continue but interrupted it at once. The outcome in his three cases testifies to the wisdom of this method of treating status epilepticus in a woman suffering from pregnancy intoxication.—*The Journal of the American Med. Asso.*

FULL TERM ECTOPIC GESTATION RETAINED EIGHTEEN YEARS.

A woman, aged 46, consulted Peterson for an abdominal tumor which had existed for eighteen years. Five years after marriage there was cessation of menstruation, the usual morning sickness and enlargement of the breasts. There was a gradual increase in the size of the abdomen until at the nine month she was as large as a woman at term. She felt life at the fifth month but does not remember at what time movement ceased. She thought she was pregnant but never had any labor pains. Shortly after the cessation of menstruation for nine months, she began to flow regularly again. She remained the same size, that is, the size of a woman at term, for two years, then gradually became smaller. For the past six years her abdomen has been of about the same

size. During the past year she has not been feeling well and has lost 10 or 15 pounds. The tumor rose rather abruptly from the pubes, the highest point being half way between this point and the umbilicus. The growth was symmetrical, smooth, somewhat tender and distinctly fluctuating. It was fixed and apparently quite densely adherent to the parietal peritoneum. Posterior to the cervix could be felt an irregular, tender mass about the size of a small hen's egg apparently attached to the tumor which could be made out as a cystic mass by palpation through the culdesac. It was impossible to palpate the appendages. On cutting through the abdominal wall, the fluctuating sac was found densely adherent to the parietal peritoneum, omentum and portions of the intestine. During the enucleation of the sac the latter was nicked in one portion, giving exit to an oily fluid of about the consistency and color of pea soup. When the sac was cut open it was found to contain the greater portion of a fetal skeleton.—*The Journal of the American Med. Asso.*

ABDOMINAL CAESAREAN SECTION.

Abdominal Cæsarean section has an established place in surgical obstetrics. Where absolutely indicated for mechanical reasons its performance should be early decided upon and patient not subjected to test of labor.

Its success will vary inversely with chance of previous infection.

Eclampsia is not itself an indication for Cæsarean section, but an obstetrical condition which precludes rapid and safe delivery through the natural passage is an indication for Cæsarean section in eclampsia.

It is preëminently important that Cæsarean section, when indicated, be done early in eclampsia before the narrow margin of safety is effaced by repeated infection-inviting examinations and attempts at delivery. This should not be forgotten when the uterus has been thus emptied the treatment is not complete. Only the "toxogenetic" focus has been removed and the further elaboration of the eclampsia producing poison stopped. The patient will

recover or succumb according to whether or not she is already hopelessly saturated with the kidney and liver necrosing poisons of eclampsia.

Placenta prævia and premature separation of normally situated placenta do not demand Cæsarean section if the soft parts are prepared for rapid natural delivery. In short, any obstetric condition that may confront us, whether it be a problem in mechanics, as an impacted shoulder presentation, or urgent pathology, as toxemia; hemorrhage, or poorly compensating heart lesion, should be indications for Cæsarean section if it appears that this operation offers best chance of life to mother and child.—*The Virginia Medical Semi-Monthly*.

SMALLPOX IN UTERO.

A woman, pregnant about three months, was sleeping in the same bed with her husband who was found to have smallpox. She was immediately removed to another room and she and her two children and a man and woman who were taking care of the family were successfully vaccinated. The woman had a typical reaction to the vaccine virus. The quarantine was raised in six weeks. One month afterward Rothwell was called to see her. On examination he could find no signs of life in the fetus and the os uteri was dilated about the size of a quarter. The vagina was aseptically packed with gauze and at 6 o'clock next morning a six or six and a half months mummified fetus was expelled. Life must have been extinct for some time, as the abdomen was discolored and distended, and the abdominal muscles and integument were very thin and fragile. What was most noticeable, however, was the presence of round, yellow, slightly pitted scars about the size of the end of a lead pencil, distributed over the whole surface of the body, where the scabs had become detached in utero. Also the vesicles and pustules that invariably accompany a severe case of variola vera were present. The mother had never a sign of a papule, vesicle or pustule but she has a normal vaccination scar.—*The Journal of the American Med. Asso.*

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, or registered letter, should be addressed to the Business manager, C. S. Briggs, M.D., corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

STANDING BEHIND OUR SOLDIERS.

You are undertaking a great duty. The heart of the whole country is with you. Everything that you do will be watched with the deepest interest and with the deepest solicitude not only by those who are near and dear to you but by the whole Nation besides, for this great war draws us all together. * * * .—
From President Wilson's Address to the soldiers of the National Army.

If the heart of the whole country is with our soldiers of the National Army, and it is believed that it is, the money of the Nation will be back of them. The Liberty Loan is to be used to arm, equip, and maintain our soldiers, to prepare them for the conflict in France, and make them as effective and powerful as possible, and safeguard them in every way possible. In addition, it will be used to give them life and indemnity insurance and provide for their dependents. The uses of the Liberty Loan appeal to every patriotic American, for it is used for our soldiers and sailors and the principles which they uphold, which the heart of the whole country is with.

The foundation of our great country is liberty; its superstructure, peace.—*William McKinley.*

STENOGRAPHERS AND TYPEWRITERS WANTED.
Men and Women.

The United States Government is in urgent need of thousands of typewriter operators and stenographers and typewriters. All who pass examinations for the departments and offices at Washington, D. C., are assured of certification for appointment. It is the manifest duty of citizens with this special knowledge to use it at this time where it will be of most value to the government. Women especially are urged to undertake this office work. Those who have not the required training are encouraged to undergo instruction at once.

Examinations for the Departmental Service are held every Tuesday, in 450 of the principal cities of the United States, and applications may be filed with the Commission at Washington, D. C., at any time.

The entrance salary ranges from \$1,000 to \$1,200 a year. Advancement of capable employes to higher salaries is reasonably rapid.

Applicants must have reached their eighteenth birthday on the date of the examination.

For full information in regard to the scope and character of the examination and for application blanks address the U. S. Civil Service Commission, Washington, D. C., or the Secretary of the U. S. Civil Service Board of Examiners at Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; Atlanta, Ga.; Cincinnati, Ohio; Chicago, Ill.; St. Paul, Minn.; St. Louis, Mo.; New Orleans, La.; Seattle, Wash.; San Francisco, Cal.; Honolulu, Hawaii, or San Juan, Porto Rico.

JOHN A. McILHENNY,
Pres. U. S. Civil Service Commission, Washington, D. C.

ONE PHASE OF HOME DEFENSE.

Washington, Sept. ——. "Protect the defective children, provide for their training and proper care, and you will lessen the burden of dependency and delinquency." This is the gist of the

advice contained in a new report on Mental Defectives issued by the Children's Bureau of the U. S. Department of Labor, and appearing with special timeliness now that war conditions may tend to make more serious the problem of delinquent and dependent children.

The report is based on a study of the social conditions of 212 mental defectives in New Castle County, Delaware. A total of, 175, or more than four-fifths of these, were in need of public supervision or institutional care because of bad home conditions, physical helplessness, or pronounced anti-social tendencies, and only twelve of them were provided for in an institution adapted to their care. Twenty-six of the defective children were in industrial schools for delinquent children, and of these the report says:

"Institutions for the care of delinquent children are greatly handicapped by the presence of defectives, since they require special attention and exert a bad influence over the normal children. After a short period of residence these defectives are returned to the community without sufficient supervision."

Other defective children with delinquency records were at large in the community; in all, 98 of the 212 defectives studied were delinquent or immoral or difficult to control.

The report suggests that, while any program for the care of mental defectives must have as its central feature suitable institutional provision offering training or custodial care according to the needs of the individual, other activities are equally essential. It is pointed out, for example, that institutional care is not necessary for all mentally defective children, for, contrary to the popular impression, it is found that there are certain types who safely can remain at home provided they have the attention and study which they deserve. However, special provision should be made for their safety, care, and education, and out-patient work of an institution for the feeble-minded, in co-operation with schools, social agencies, and families, is referred to as a new and important method of providing in the most humane possible way for such children.

The possibilities of industrial training by which certain types of defectives may gradually become in part self-supporting and the importance of providing facilities for mental examination and diagnosis of doubtful cases are also brought out in the report.

New York, September 20, 1917.

Dr. C. S. Briggs, Nashville, Tenn.:

My Dear Editor—To further the interest of the Surgeon General's office in securing a sufficient number of applicants for commission in the Medical Reserve Corps, it has been suggested that the profession at large be given an idea of the real pleasure as well as profit that those in medical officer's training camps enjoy.

Believing that you must have one or many of your friends in these camps, won't you write to them asking for a letter for publication, expressing in a general way, the pleasure as well as the character of work carried on?

It seems to be the assumption in certain minds that Medical Reserve Officers have rank but no standing or proper recognition of rank with officers of other branches of the service or that the average regular army officer looks upon the Medical Reserve Officer as an inferior personage all of which I personally know not to be the case.

Officers of the Medical Corps of the United States Army, who are detailed instructors, have but one ambition and that is to impart as agreeably, readily and thoroughly as possible, their knowledge of military medical work to the Reserve Corps Officers.

So that you may fully understand the character of letter that will be of the greatest service, I would refer you to the communication from Lieut. Guedel and Lieut. Moore, appearing in the September issue of the American Journal of Surgery.

It is absolutely necessary that any letter sent from a training camp, should be first submitted to and passed by the commandant of the camp.

In these times when the interest of the medical profession is centered almost solely upon war news and information of a medical military character, you can unmeasurably add to the attrac-

tiveness of your journal to your readers, by letters of this kind and other information relating to the Medical Reserve Officer and his work. I am,

Cordially yours,

J. MACDONALD, J8., M.D.,

Secretary-Treasurer.

MORTALITY CAUSED BY AUTOMOBILES AND BY OTHER VEHICLES COMPARED.

Another condition developed by this study is the fact that as far as the industrial population is concerned, more deaths are caused by automobiles than by surface cars, subway cars, subway trains, elevated trains, bicycles and horse-drawn vehicles combined. Indeed, in 1916 the 756 deaths caused by automobiles approaches very closely the 799 persons insured in the company killed on steam railroads.

The figures for Metropolitan policy-holders, it must be borne in mind, represent, almost exclusively, pedestrians, rather than those who ride in the machines. This is particularly true of the children. A large part of this mortality, it is evident, is due to reckless driving and to the heedlessness of children to the dangers to which they expose themselves. But whatever be the cause, it is clear from these figures that the automobile is an important agency of death and that its control by the communities must be immediate and thorough if improvement is to be made.

WEEKLY HEALTH INDEX.

Washington. D. C., October 11, 1917.—As a *health index* the Bureau of the Census will publish each week mortality reports from the largest cities in the United State.

There will be given for each city the total number of deaths reported (still-births excluded), the death rate, the number of deaths under one year of age, and the proportion of infant deaths to total deaths.

Where the data are obtainable for the previous five years, averages for the corresponding weeks will be given for each city.

These totals, rates, and percentages will permit valuable comparisons and will serve as a ready health index for health officers and others. As weekly figures always fluctuate widely, caution must be used in their interpretation. Health experts, however, will immediately appreciate the value of this new compilation.

ACTION OF NATIONAL ASSOCIATION.

Several important matters were acted upon at the recent meeting of the Executive Committee of The National Association for the Study and Prevention of Tuberculosis, and are of interest to the membership of the Association and to other readers of the Bulletin.

The following resolution was adopted placing the Association on record as endorsing the principle of separation allowances to be provided by federal legislation.

Resolved, That the Executive Committee of The National Association for the Study and Prevention of Tuberculosis endorses the principle of separation allowances to be provided by federal legislation and of compensation for the injuries, sickness and death resulting from war, and that a committee be appointed to further federal legislation to the above end.

A bill embodying these features is now being introduced in Congress.

The attitude of the Association at the Cincinnati meeting in urging physicians and nurses who have specialized training in tuberculosis to utilize that training where it will be of most advantage was further endorsed by another special resolution adopted by the committee, which reads as follows:

Resolved, That The National Association for the Study and Prevention of Tuberculosis through its Executive Committee strongly urges the physicians who are experienced in the diagnosis and treatment of tuberculosis in all parts of the country to co-operate with the federal medical authorities and in every way that may be suggested, and without regard to commissions.

The executive secretary was also authorized by resolution to confer with Col. G. E. Bushnell of the surgeon general's office of

the War Department with reference to referring cases of tuberculosis discovered in the examination of recruits.

The employment of arrested cases of tuberculosis in light positions in outdoor work in order to release individuals for more vigorous service was discussed and it was decided that the executive office should communicate with State associations, federal authorities and other groups asking with regard to positions such as those of watchmen, rural delivery postmen, etc., and suggesting that these positions be thrown open to arrested cases of tuberculosis. It was also suggested that legislation that would prevent such employment be eliminated. The executive office was also requested to look into the question of governmental regulations preventing the employment of arrested cases of tuberculosis.

The prevalence of tuberculosis among Roman Catholic sisterhoods, nuns, teachers, etc., and the lack of hygienic teaching in parochial schools was discussed and the executive office was instructed to confer with certain leading Catholic clergy and laymen relative to such measures as might be acceptable to the Church.

Obituary.

Dr. Thos. E. Elliston died at his country home near the Hermitage October 13th, from a complication of diseases. Dr. Elliston was a prominent practitioner of medicine in this city for nearly forty years and enjoyed a large and exacting practice in the section in which he lived. He specialized in obstetrics and had a record of nearly twenty-five hundred deliveries. Dr. Elliston was an excellent physician, a careful, conscientious practitioner and a most estimable, upright, and honorable gentleman.

Reviews and Book Notices

Progressive Medicine—A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia. Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia, September 1, 1917. Owners and Publishers, Lea and Febiger, Philadelphia, New York. Six dollars per annum.

This number of this ever welcome quarterly publication, with its full quota of good things for the progressive up-to-date physician, has been received, and we take great pleasure in again calling the attention of the medical profession to its great value as an educator and a true indicator of the advances and discoveries of the most recent date in the medical and surgical sciences. It represents the cream of serial medical literature. It is the wheat removed from the chaff. By means of this quarterly we can see at almost a glance what is occurring in the medical world just as the scouting aviator sees what movements are made by the enemy on the battlefield. The editors have shown wise discrimination in the selection of the following well known authorities as contributors to this number. These are: Edward P. Davis, M.D., William Ewart, M.D., F. R. C. P., William S. Goetheil, M.D., and Wililam G. Spiller, M.D. The subjects treated of in this number are as follows: "Diseases of the Heart, Lungs and Blood Vessels"; "Dermatology and Syphilis"; "Obstetrics"; "Diseases of the Nervous System" and Index. We can not say too much in praise of this excellent quarterly publication. It is a library within itself and it presents the newest work in every branch of medicine. In subscribing to this publication the practitioner can make no mistake for it is all that it purports to be and will be a great help to every practitioner who desires to keep in the front ranks of the medical profession.

Publisher's Department

Notwithstanding the large number of Hypophosphates on the market, it is quite difficult to obtain a uniform and reliable syrup. "Robinson's" is a highly elegant preparation, and possesses an advantage over some others, in that it holds the various salts, including iron, quinine and strychnine, etc., in perfect solution, and is not liable to the formation of fungous growths. (See advertisement in this issue.)

URINARY ANTISEPSIS.

In the opinion of many practitioners sanmetto offers the nearest approach to the ideal inhibitor to bacterial growth. It is not only non-toxic and non-irritating but rather soothing to the urinary tract, while not strongly antiseptic yet sufficiently bacteriostatic for common routine cases. It is largely excreted by the kidneys. In prostatic cases it tends to relieve incontinence, clears up the urine, and is useful as soother before and following instrumentation. It is of positive value in urethritis and cystic conditions. It is never accompanied by the untoward conditions so often following the use of more powerful germicidal and bactericidal antiseptics. Sanmetto is safe.

COD LIVER OIL IN THE DEBILITATED.

The reason why ordinary cod liver oil is not adapted to most debilitated cases is to be found in the fact that the impaired gastric function quickly gives way under the extra burden of digesting the fatty substance contained in the oil.

The objection to the plain oil is obviated if a palatable preparation, such as Cord. Ext. Ol. Morrhuæ Comp. (Hagee), is employed.

Not only is Cord. Ext. Ol. Morrhuæ Comp. (Hagee) palatable and tolerated for indefinite periods, but further still it offers the debilitated patient the every essential property of the plain oil. It is everything that plain cod liver oil is except disagreeable.

A RELIABLE ANODYNE.

In casting about for a reliable anodyne for routine purposes, the physician can make no better choice than Papine (Battle). The reasons are that it is a purified opium product of definitely uniform strength, carefully prepared and productive of a minimum of after-effects.

Papine (Battle) is of particular advantage in the case of women or neurotics, who must be protected from the psychical impression offered by a hypodermic injection of morphine.

Whenever an anodyne is needed Papine (Battle) will be found to serve to the utmost.

JUST WHAT PASADYNE (DANIEL) IS.

To disabuse the minds of those who may think that Pasadyne (Daniel) is a mixture of various sleep-producing agents, we wish to emphasize the fact that Pasadyne (Daniel) is nothing but a pure, concentrated tincture of *passiflora incarnata*. The name "Pasadyne" is merely a distinctive name used to distinguish our *passiflora* product from other similar preparations but of inferior therapeutic worth. We have specialized for more than forty years in making Pasadyne (Daniel). Hence, it ought to be a superior product. It is a safe and dependable nerve sedative. It has no concern with the Harrison Act. Write for sample bottle to John B. Daniel, Inc., Atlanta, Georgia.

THE OBSTIPATION-STATUS-AUTOTOXEMIA SYNDROME is complex in its etiology as well as in its nosology. Anything that interferes with the calibre of the gut, or with the free passage of intestinal contents through the tube, results in a difficult passage of the bowel contents along the intestinal canal—Obstipation.

This may be ptosis, or displacement of the gut at some point, a kink, abnormal sagging of suspensory structures, or dislocation of some part of the tube. This, together with abnormal dryness or lack of lubricating mucus, due to disturbance of the intestinal mucous glands, results in stagnation of the current, stopping in many instances, a damming back of the current—Stasis.

As a result of these influences, opportunity is given for increased bacterial or chemical action, the production of an abnormal amount of toxins of unusual virulence, irritation and disturbance of the filtering or protective action of the mucous membrane and resulting absorption of increased quantities of poisonous material—autotoxemia.

As a result of so many factors working more or less interdependently, is the establishment of the Syndrome—a complex group of many symptoms, that may simulate almost any disease or diseased condition met with in medicine.

Furthermore, these conditions, if allowed to go uncorrected, may and often do, aggravate or cause serious, even fatal disease.

The ideal treatment for such conditions is lubrication. The ideal intestinal lubricant is INTEROL because it comes close to Nature's own lubricant—mucus—in that it lubricates without stimulation, irritation or enervation. Being non-absorbable, it lubricates "all the way." On account of its characteristic *lubricating body* it efficiently mixes, spreads and clings in the intestinal tract, and unless too much is administered it does not separate from the feces it lubricates and keeps soft. It does not "ooze,"—"per se."

NASHVILLE JOURNAL

— OF —

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CHARLES S. BRIGGS, A.M., M.D., Editor.
W. T. BRIGGS, B.A., M.D., Associate Editor.

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Original Communications

THE ULTIMATE RESULTS OF THE OPERATIVE TREATMENT OF MAMMARY CANCER.*

BY DR. HANS LINDENBERG,
Assistant Physician of the Clinic.

(Translated by W. T. Briggs, M.D.)

Less than fifty years have passed since members of the medical profession ceased to consider cancer an absolutely incurable disease. During this time the surgery of cancer has become more and more potent. With the discovery of the X-rays and radium of comparatively recent date the surgeon has found, it seems, a powerful ally; but the results of "ray therapy" are still recent and some time must have passed before we have proof of its power. In our clinic the X-rays have also been used as an adjunct to the operative treatment, but up to the present time I have not been able to calculate their effect in the statistics of our results in mammary carcinoma. During the time under consideration only a few X-ray treatments have been given and these, with what is now considered unsatisfactory apparatus. For this reason my statistics are based entirely on the operative treatment.

The 183 cases considered in this article were operated during the years 1901-1910 at the surgical clinic at Rostock under Prof. Muller, who took charge of the clinic in the fall of 1911. So the latter date was chosen as the starting point. Cases operated during the last

*From the Surgical Clinic of the University of Rostock—Geh. Medizinalrat Prof. W. Muller.

three years were not included, since three years is the shortest time without recurrence required before the case can be rated as cured. In this way a better comparison can be made, since most modern statistics are based on the three-year period. Results should determine whether this time limit is long enough.

I will not discuss here the origin of mammary carcinoma nor cancer in general. However, I would like to take up in a general way the previous histories of our patients in order to see whether they give us any clue to the more frequent cause of origin of mammary cancer or perhaps some exciting cause.

First of all comes the question of heredity. In only twenty cases was there a history of cancer in the family. However, it must be taken into consideration that on account of the prevailing dread of cancer in this country any such questioning must be conducted with the greatest tact, because of the psychic effect on the patient. Oftentimes neither the patient nor her relatives know the true nature of the trouble. Therefore, the small percentage (10 per cent) of carcinoma cases in the immediate family can make no claim to completeness. On some such basis I suppose can be explained the very different statements in the literature. While Rosenstein finds a hereditary influence in 3.1 per cent of his cases; Gebele and Winiwarter 5 per cent; Horner and Poulsen in Copenhagen found 17 per cent; Wunderli in St. Gallen 20 per cent. So statistics do not answer this question satisfactorily.

It is easier for the surgeon to question in regard to injury than in regard to heredity. But even here we find an obstacle to accuracy, since most people do not associate cause and effect unless there is some external manifestation. Consequently the effect of trauma is probably undervalued by most physicians.

Horner alone attributes great significance to it in the later development of cancer. In 11 or 6 per cent of our cases the patients thought the trouble was caused by a punch or blow. The statements of other investigators varied between 2.2 per cent (Hildebrand) and 44 per cent (Williams). About 10 per cent was the average. Williams, however, emphasized the fact that a single so-called acute trauma has little relationship to later carcinoma. It is easier to suppose that chronic irritation favors the development of cancer. I favor this view myself.

Figures help but little in an attempt to determine the influence of marriage on the later development of cancer. Among women of middle age the married preponderate in number. So it is not astonishing if most authors find the married in much greater numbers, the percentages varying from 60 (Poulsen) to 90 (Winiwarter). Heath must be excepted, since he observed the disease oftener in the single. Our figures show 84.4 per cent married. How many of these had borne children, I am sorry to say, could not be definitely determined from the histories.

In 10 or 5.4 per cent there had been a previous inflammation of the gland; but Winiwarters records give 21.05 per cent; Cebele's 20 per cent; Sprengel's 30 per cent; Oldekopf's 9 per cent, and Hildebrand's even 41 per cent. So mastitis, perhaps because of the scar tissue, must not be entirely forgotten as a predisposing cause of cancer.

Age is a very important factor whenever cancer is concerned. In mammary cancer there is no exception to the rule that cancer before thirty is extremely rare. Our youngest patient was twenty-two years old. As might have been supposed, our four patients under thirty confirmed the experience that carcinoma in young individuals is usually very malignant. Three died before one year had passed, the fourth in the second year after operation. According to age our cases were divided as follows:

Under 20	0
Between 20-30	4
Between 30-40	19
Between 40-45	26
Between 45-50	40
Between 50-55	27
Between 55-60	19
Between 60-65	23
Between 65-70	19
Over 70	6

The percentage of cases in the decade 40-50, especially the second half, was much greater than in the other decades. Seventy-six women had passed the climacteric, 59 had not; in 43 cases this was not noted. In my opinion it depends but little on the exact time the

menses cease, since the changes in the female body during this transitional period often extend over a period of several years. It is only natural that in a period of total change latent cells should receive a stimulus to grow and thus lead to neoplastic formation. Ninety-three, or a little more than half of our cases, were affected between the ages of 40-55 years. But older patients furnish a large percentage. A rapid decline in incidence after 70, such as Sprengel mentions, was not noted in our material. From the above we can conclude that mammary cancer is generally a disease of middle life and old age. This conclusion coincides with that of most authorities excepting Sprengel and Volkmann, who think 50-60 the commonest age. During this time we treated three cases of cancer of the breast in men; one was 50 years old, two in the sixties. I have included these in the records, since as single cases they would possess no statistical value.

Unfortunately, the time between the discovery of the tumor by the patient and the operation, could be determined accurately in only a few cases. This question is too dependent on the degree of personal attention e. g. depends on the care each devoted to her body. An educated woman, who has heard of breast tumors and their malignancy, will note the presence of tumor sooner than the working woman. Cancer cases in the family or among friends put them more on their guard. In regard to the time the tumor had been present our patients answered as follows:

Less than 2 weeks.....	10
From 2-4 weeks	16
From 1-2 months	22
From 2-3 months	16
From 3-6 months	27
From 6-12 months.....	44
From 1-2 years	22
From 2-3 years	9
From 3-4 years	4
Over 4 years	13

At least 1-3 of the patients came to the clinic within three months after the discovery of the tumor, almost 3-4 within one year. As a rule the patients have come to the clinic relatively early.

What were the results of examination on entrance? Like Steintal and others I would like to separate the cases into four divisions according to the clinical findings. In group I, I place slow-growing neoplasms which are freely movable with no glandular metastases. Group 2 includes those in whom the tumor has advanced a step further, although the axillary glands are not palpable, neither is there extension of the growth to the skin or muscles nor is there any fixation. Group 3, those cases with extension of the growth to the skin or to the muscles or to both, with metastases to the glands.

Group 4, cases with supraclavicular extension. As often mentioned in the literature, so in our cases, there was not always a definite relationship between the clinical condition of the axillary glands and the microscopic findings. The axillary glands were palpable in twenty-eight cases in which there was no cancerous invasion demonstrated, while in four cases cancer was found in glands which had not been palpated. I will discuss the microscopic findings in the different groups, since this is decisive in the prognosis. Our cases were divided as follows

Group 1	35
Group 2	81
Group 3	53
Group 4	14

According to the time from the discovery of the tumor to the operation the different groups show the following:

	Group			
	1	2	3	4
Before 1 month had passed....	8 cases	17 cases	1 cases	0 cases
Before 3 months had passed	8 cases	21 cases	5 cases	4 cases
Before 1 year had passed....	15 cases	29 cases	23 cases	4 cases
After 1 year had passed.....	4 cases	14 cases	24 cases	6 cases

In two cases the tumor had been present more than four years.

In group 1 the number of early cases, e. g. those operated within three months after discovery of the tumor, was 45.7 per cent; in group 2, 46.9 per cent; in group 3, 11.3 per cent, and in group 4, 28.6 per cent. From these figures we must conclude that time alone has comparatively little relationship to the stage of the neoplastic

growth. For on an average the cases in group 1 had tumors which had not been present longer than those in group 2, as a matter of fact the percentage of relatively early discovered tumors is greatest in group 2. Group 1 is unique. The tumors of patients in this group seem to have but little tendency to spread. They are unique also as we shall later see in the operative end-results. Both breasts were simultaneously affected in two cases. Both cases died of cancer within one year.

Let us now compare these clinical findings with the pathologic-histological diagnoses which were made either during or after the operation. All of the tumors were examined in the pathological laboratory in Rostock. Almost all the carcinomata had originated in the glandular tissue; they represent the different types of solid carcinoma. We had only one case of the rare squamous cell carcinoma (Langhans). The following diagnoses were made:

Carcinoma, Simplex and Scirrhus.....	1
Scirrhus	40 cases
Adenocarcinoma	31 cases
Medullary Carcinoma	4 cases
Colloid Carcinoma	5 cases

In four tumors of different types were found in different parts of the same breast and should be looked upon as transitional types. They were:

Carcinoma, Sixplex and Scirrhus.....	1
Medullary Carcinoma and Scirrhus.....	2
Adenocarcinoma and Scirrhus.....	1

In one case of scirrhus the examination of the axillary glands gave same result as in carcinoma simplex. Finally one of the cases in which both breasts were affected, showed carcinoma simplex of the right and scirrhus of the left. In these cases there was not a single instance where there was a benign as well as a malignant tumor in the same or other breast. More than half of our cases had carcinoma simplex, 2-9 scirrhus and 1-6 adenocarcinoma. So these are the types with which we usually have to deal. With us the medullary and colloid types were very rare. I am sorry to say I found but little in the literature about the distribution according to the pathological findings. Most articles discuss only the proportion

of cures to the total number of cancers. Wunderli's statistics agree for the most part with mine. They show a somewhat greater percentage of carcinoma simplex but a much smaller percentage of adenocarcinoma than mine. In 36 cases Hildebrand found scirrhus 11 times and colloid cancer 5 times. He makes no distinction between adenocarcinoma and carcinoma simplex. Salomon in 1913 made a report on the material of Bier's clinic from a pathologic-histologic standpoint. His figures agree with mine except that scirrhus formed a much smaller percentage. Leech found an unusually large percentage (54) of scirrhus. I wish to illustrate the relationship of the clinical to the histologic findings, and both of these to the duration of the disease by the following tables:

Time	STAGE 1—35						STAGE 2—81					
	Scirrhus	Ca. Simplex	Adeno. Ca.	Colloid- Ca.	Medullary- Ca.	Total	Scirrhus	Ca. Simplex	Adeno- Ca.	Colloid- Ca.	Medullary- Ca.	Total
Before 14 days	3	...	...	...	...	3	3	3	...	...	1	7
14-30 days	5	...	...	...	...	5	2	8	...	...	...	10
1-2 months	1	4	1	...	1	7	5	4	2	1	...	12
2-3 months	1	...	...	...	...	1	2	3	1	...	1	7
3-6 months	4	4	1	...	...	9	3	1	4	1	1	10
6m—1 year	1	2	3	...	...	6	6	11	2	...	...	19
1-2 years	1	...	1	...	...	2	...	4	2	...	...	6
2-3 years	2	...	...	...	...	2	...	1	...	...	...	1
3-4 years .....	...	...	...	...	...	...	1	1	...	...	...	2
Longer .....	...	...	...	...	...	...	3	...	1	...	...	4
	4	20	9	1	1	...	22	39	11	3	3	...

Time	STAGE 3—53					STAGE 4—14						
	Scirrhus	Ca. Simplex	Adeno- Ca.	Colloid- Ca.	Medullary- Ca.	Total	Scirrhus	Ca. Simplex	Adeno- Ca.	Colloid- Ca.	Medullary- Ca.	Total
Before 14 days .....	...	...	...	...	...	...	...	...	...	...	...	...
14-30 days	1	...	...	...	...	1	...	...	...	...	...	...
1-2 months .....	...	...	...	...	...	...	...	1	...	...	...	1
2-3 months	1	3	1	...	...	5	...	1	1	...	...	...
3-6 months	1	5	...	...	...	6	...	1	...	...	...	...
6m—1 year	4	8	2	...	...	14	1	2	...	1	...	...
1-2 years	3	6	1	...	...	10	...	3	1	...	...	...
2-3 years	2	...	...	...	...	...	...	...	...	...	...	...
3-4 years	2	...	...	...	...	2	...	...	...	...	...	...
Longer	2	3	2	...	...	7	...	...	...	...	...	...
	11	30	6	...	...	...	1	8	2	1	...	...

(Neither Table 3 or 4 are correct in the original article since the tabulated total does not agree with the total given for these groups.)

These tables show that to the first clinical stage belong:

- 29 per cent of the cases of Adenocarcinoma.
- 21 per cent of the cases of Carcinoma Simplex.
- 10 per cent of the cases of Scirrhus.
- 25 per cent of the cases of Medullary carcinoma.
- 20 per cent of the cases of Colloid carcinoma.

The last figures illustrate well the uncertainty of using the percentage basis when small numbers are used. For instance, with five colloid and 4 medullary cancers, each of which came to us with the trouble not far advanced so far as could be determined clinically, my figures show respectively 20 and 25 per cent, which would lead to wrong conclusions unless the total number of cases were considered. We will refer again to the question of percentage statistics based on insufficient material in the discussion of results. Compared to the other tumors, adenocarcinoma seems to show less tendency to spread rapidly. Halstead and Salomon also emphasize this fact. This corresponds with its anatomical structure inasmuch as it resembles most the normal structure of the point of origin—the glandular acinus. In the first group, scirrhus shows the lowest percentage of the different types, 55 per cent in the second, 27.5 per cent in the third, and 7.5 per cent in the fourth. Carcinoma simplex was present in 40.5 per cent in the second group, 31 per cent in the third, 7.5 per cent in the fourth. According to their tendency to spread the principle types of carcinoma in the first group can be arranged as follows:

1. Adenocarcinoma.
2. Carcinoma Simplex.
3. Scirrhus.

In the second group this arrangement is changed in that scirrhus stands first, carcinoma simplex second and adenocarcinoma third. Taken all in all one gets the impression that any type of cancer may progress rapidly or slowly. Especially is this so in regard to scirrhus, which is rightly considered a slowly growing type of cancer.

The tumor was located 98 times in the left breast, 83 times in the right breast and twice in both. In detail the position of the tumor was as follows:

Right		Left
Upper outer quadrant	25 times.....	40 times
Upper inner quadrant	9 times.....	11 times
Lower outer quadrant.....	10 times.....	5 times
Lower inner quadrant	2 times.....	1 time
Upper half	8 times.....	11 times
Lower half	2 times.....	1 time
Outer half	4 times.....	5 times
Inner half	1 time.....	2 times
Central part	13 times.....	2 times
Entire breast	11 times.....	8 times

The left breast was oftener affected than the right, but not to such a degree that any special conclusions can be drawn. Against making such a mistake Winiwater has already cautioned in a review of the statistics of Henning, who noted that the right breast was oftener affected and attributed this to the more severe injuries to which this breast is subject. Winiwater and other authorities all agree that the upper outer quadrant is the most common site of tumor, and for the most part they also agree that the upper half is affected oftener than the lower and the outer half oftener than the inner. The lower inner quadrant escapes oftener than any other part.

So far as the operative treatment of carcinoma of the breast is concerned, only since 1867 have we been able to speak of success. It was then that Moore taught that the entire gland must be considered diseased, and not only the tumor but the entire gland as well, should be removed. Along with increased knowledge of the ways in which cancer of the breast spreads, which was especially furthered by Volkman, Kuster, Gerota, Stiles, Grossmann and Rotter, the operative treatment has become more and more radical. During this time, Kuster in 1883, advocated the removal of the regional lymph glands in operations on the cancerous breast, and all other cancers. Rotter showed that in movable tumors, when neither the pectoralis major nor its fascia were affected, the lymph glands under the pectoralis major contained metastases. He demonstrated in 11 out of 35 cases that the lymphatics of the breast passed through the pectoralis major and in this way could carry cancerous

cells to the retromuscular glands at an early date. Grossmann had succeeded in demonstrating this but 3 times in 30 examinations. Because of this fact, Rotter advised the routine removal of the sternal portion of the pectoralis major together with the entire pectoralis minor; the latter interferes with exposure of the axillary space and is itself often the seat of metastases. Halstead is even more radical, in that he removes the supraclavicular glands in every case after a temporary resection of the clavicle.

(To be continued.)

Extracts from Home and Foreign Journals

SURGICAL

NERVE BLOCKING IN TREATMENT OF CAUSALGIA.

Pitres and Marchand report that Sicard's method of injecting diluted alcohol into the trunk nerve has put an end to the distressing cases of intense pain, or causalgia, following a war wound. Before this method was introduced, they had numbers of wounded suffering tortures from this cause which they were unable to relieve by any measures. The pains subsided at once on blocking the nerve with alcohol, injecting 60 per cent alcohol into the nerve above the lesion in the thirty patients given this treatment. Three cases are described in detail to demonstrate that this nerve blocking does not aggravate preexisting motor paralysis or bring on new. On the contrary, when the pain was arrested by the alcohol, certain other disturbances disappeared with it, especially the co-organic paralysis, the nature of which is still a mystery. The causalgia in the first case had persisted for a year, not modified by an operation to free the nerve embedded in cicatricial tissue. The second patient had been wounded in the thigh, and the causalgia accompanied paresis in the domain of the femoral nerve. The femoral nerve was opened up under chloroform and 4 c.c. of 60 per cent alcohol injected. The pains disappeared at once, and also the paresis but more gradually. Alcohol at 60 per cent interrupts conduction of sensation but apparently does not modify conduction of motor impulses. Before the nerve blocking there was partial reaction of degeneration, but this gradually became total notwithstanding the conservation of volitional contractility in the muscles involved. In the third case the pains were in the palm although the wound was on the arm. The alcohol was injected in the wrist, but this induced merely a very brief and fleeting relief of the pain. This experience sustains Sicard's directions that the nerve has to be blocked above the lesion to be effectual.—*The Journal of the Am. Med. Asso.*

ACUTE APPENDICITIS.

There were thirty-four deaths, or a mortality of 6.8 per cent, among the 500 cases analyzed by the authors. Twice as many died who were operated on the third day after the onset of symptoms as on any other day of the illness. The mortality of those under 10 years and over 50 is 23 per cent as opposed to a mortality of 4.7 per cent for those between. Complications were found in 151 persons, or 30 per cent. There were 107 cases of appendicular abscess, or 21 per cent. The mortality was 5.7 per cent. There were forty-five instances of diffuse peritonitis, or 9 per cent. Twenty-one, or 47 per cent, of these patients died. Fecal fistula occurred twenty-four times, an incidence of 2.5 per cent. There were four fatalities in the series, or 33 per cent. Secondary peritoneal abscess occurred in eleven instances, being present in one patient at operation and ten times as a sequel. Three of these were subphrenic abscesses. Of the eleven cases, four patients died, a mortality of 36 per cent. Only two cases of ileus were found: One was due to adhesions; the other was a paralytic ileus.

A history of previous attacks was obtained in one-fourth of the cases. Vomiting was mentioned in the histories of four-fifths of the cases. Five per cent more had nausea without vomiting. Constipation was five times as frequent as diarrhea. A blood count was recorded in 377 of the cases. Neither a normal blood count nor a very high one rules out appendicitis, although such counts are comparatively rare. The mortality was higher among the two extremes and most favorable with a moderate leukocytosis. The relation of the numerical count to the differential count did not appear to have any prognostic significance. Of 117 perforated cases seventeen died, a mortality of 15 per cent. Of 138 cases with gangrene and no perforation nine died, a mortality of 6.5 per cent. Of 180 suppurative cases without either perforation or gangrene four patients died, a mortality of 2 per cent. Thirty per cent of perforated, 16 per cent of gangrenous and 10 per cent of suppurative cases developed abscesses. Twenty-four per cent of perforated, 8 per cent of gangrenous, and 1 per cent of suppurative developed diffuse peritonitis. The

incidence of all complications in perforative cases is 61 per cent, in gangrenous 38 per cent, and in suppurative 22 per cent. It appears from this that the danger of a diffuse peritonitis is greater when there is a perforation than when the inflammation spreads through the appendicular wall, for in the latter case there is a better chance of the peritoneum localizing the disease. There were twenty cases, or four per cent, in which it was not possible to remove the appendix. All but two of these were in abscess cases. Three of the twenty patients died, a mortality of 15 per cent—*Journal of the Am. Med. Asso.*

EARLY DIAGNOSIS AND SURGICAL TREATMENT OF GALL-BLADDER DISEASE.

L. C. Kern (Jour. Iowa State Med. Soc.), epitomizes his views as follows. First, Gall-bladder disease is not diagnosed sufficiently early. In many cases of cholecystitis and gall-stones, the patients are treated for some other malady based upon a faulty diagnosis. If surgical treatment is given, the operation has been so long delayed that the best results are not obtained, and while our percentage of course is great, the complications arising from delay make the end results, in many cases, undesirable. Second, infection of the gall-bladder, with or without gall-stones, is always a surgical disease. Third, many of the metabolic faults and secondary infections, such as rheumatism may have their origin in the gall-bladder. Fourth cancer of the gall-bladder is clearly proven to be associated with a chronic irritation of the gall-bladder due to gallstones, with a probable infective agent as a further cause. Fifth, by an early diagnosis and proper surgical treatment we will prevent many of our patients from having secondary infections from improper medical treatment or delayed surgery. That we will prevent the most potent exciting cause known at this time as a causative agent in cancer of the gall-bladder.—*Medical Progress.*

MEDICAL

INDICANEMIA, SYMPTOM OF RENAL INSUFFICIENCY.

Tcherkoff refers to the recent progress of our knowledge of azotemia. Retention of nonalbuminous nitrogen was known even to some of Bright's contemporaries and there are numerous old studies of the subject which, however, led to conflicting conclusions. Strauss was the first to arrive at harmonious results, and to revive the flagging interest, and Widai and Javal distinguished between chlorine retention and nitrogen retention. It was recognized by Weil that the latter means something more than excess of blood urea. Two other substances, creatinine and indican, began to receive attention. It was shown that uremia of a certain clinical type was not dependent on nitrogen retention—eclamptic, or pseudouremia. It was also learned that "considerable degree of nitrogen retention could occur without the development of uremia and that in such cases a strong indicanemia could be present. Conversely uremia could occur with but little urea retention, and in such cases indican could be absent from the blood. The technic for measuring blood indican is somewhat complicated, and this fact had led the author to devise a more simple method. He punctures a vein to obtain 8 or 10 c.c. of blood serum, adds an equal quantity of 20 per cent trichloroacetic acid and filters. The 10 c.c. of filtrate he adds an equal amount of concentrated HCl, containing 5 grams per liter of perchloride of iron. The mixture is then shaken and 3 c.c. of chloroform added. During the next 15 minutes the mixture is shaken several times. If indican is absent no coloration appears. If present a pale to dark blue color is manifest, varying with the amount of indican present. This method is also of value for the recognition of iodine in the blood, the presence of which is shown by a rose or rose violet color. The two reactions tend to cause confusion, and no test for indican should be made on patients who are taking iodides. The amount of indican is estimated by control color solutions. The test is so simple that no practitioner can afford to omit it. If indican is present at all it implies an azotemia of about 1.5 per cent, and always means renal insuffi-

ciency. If the patient have chronic nephritis it signifies a fatal ending within a few months—often a few weeks. In certain of these cases the blood urea is barely increased. Azotemia is by no means synonymous with uremia.—*Medical Record*.

RELATION OF DENTAL INFECTION TO CANCER.

In an article on "Prevention of any Treatment of Cancer Based upon X-ray Findings of Dental Infection," Sinclair Tousey (N. Y. Med. Jour. asserts that his own observations show severe dental infection in all cancer patients. No complete study of the microorganisms in these abscesses has yet been made; the reports on the cultures so far showing the presence of streptococcus viridans and non-pathogenic organisms. He believes that researches made with a view of identifying the different organisms may discover a specific cancer germ or a specific strain, or it may show that inveterate infection with any of the organisms will eventually produce cancer in a certain percentage of cases. While it is not to be supposed that every case of dental infection leads to cancer, the early discovery and eradication of all dental infections will doubtless prevent cancer of the stomach and gall-bladder, and possibly many cancers of other internal and external organs. The existence of severe dental infection in his cases of cancer of the breast is not to be lightly regarded as a coincidence when the same sort of infection has been proven to be causative of cancer of the stomach. X-ray examination of the teeth should be made in patients with cancer so as to discover and eradicate foci of infection, and the sooner this is done the better the chance of success with operation by the knife or electricity, combined with X-ray and radium. An autogenous vaccine prepared from the micro-organisms in dental abscesses will doubtless be indicated in a greater percentage of cancer patients than among the arthritic cases, where the eradication of the dental focus usually overcomes the general infection. The patient's hopes should not be unduly raised, because even if the autogenous vaccine proves to be a specific, the nature or the stage of the disease may make death inevitable.—*Medical Progress*.

OBSTETRICAL

TWILIGHT SLEEP.

Burton A. Washburn, M.D., (Medical Summary), says: I want to call your attention to one fact, and you can refer to any neuralist and he will tell you that our own native Americans are people of high nerve tension and that they do not have that relaxing or resigned temperament that you see in other nationalities. You can not pick them up and dope them on narcotics in frequent enough doses to give them complete freedom from pain without showing toxic reaction in a great many cases.

Now, I am dealing with every-day truths, and you can take the records in any of the hospitals in large cities, and the records will show, taking the nationality as the foundation, that our native Americans are more responsive for worse or better than any other race of people. I make this statement to show nerve reaction, and why scopolamin-morphine has practically gone into disuse in the past few years. And why it is now revived is best known to many who advocate their use in all cases. Conservatism is the professional foundation, and the man who carries the same as a side line and appeals to the sentimental public is not always rewarded for such a course. Give scopolamin-morphine its just credit, but when misfortune comes to a case, who is to blame, the drugs or the doctor? If you cause the doctor to take up, or renew, a bad line of practice which is already being done, by such public sentiment to have disaster in cases, due the fine reports of others, who have you benefited?

I want to say that I have seen satisfactory results with this drug, but I have also seen susceptible cases to toxic drug reaction show violent delirium, prostration and complete relaxation of all pains, and instruments were necessary to complete the case, which otherwise would have been a normal labor.

It is claimed that the use of scopolamin-morphine lessens the deathrate of childbirth; it renders labor painless; it lessens forceps delivery and forceps lacerations; it shortens time of labor; hemorrhage is not apt to follow its use.

Now, the facts about its use that I will make mention are conditions which I have witnessed. I will give them to you as they actually existed:

Scopolamin will stop labor. I have seen delirium from the muttering of senseless expressions to such violent physical resistance that the patient had to be strapped in bed. It will not stop sensibility to pain without producing some complication in most cases. It causes muscles to loose their tenacity and tear like paper. It places the patient in grave danger after labor from hemorrhage, because it inhibits the contractile power of the entire uterine muscle.

—*Medical Progress.*

INDICATIONS FOR INTERFERENCE IN PRE-ECLAMPTIC TOXEMIA.

Dr. William G. Dice, Toledo, Ohio: The character and quantity of the waste products from a study of urine are not definite indexes of severity of the toxemia. The systolic blood pressure taken throughout pregnancy is ordinarily a better index. A steady increasing rise from the average normal, 110 to 120, up to 150, is significant, and there is a sudden increase in the evidence of toxemia when blood pressure reaches that point. Elevated blood pressure often precedes albuminaria, and the two are not necessarily proportional. When the blood pressure reaches 170, if other signs of toxemia are also present, time for expectant treatment is near an end. Toxins in the blood give rise to retinitis, the first symptom objectively being edema, later infiltration, degeneration and hemorrhages or perhaps detachment of the retina; both the latter indicate grave toxemia. In the early stage of retinitis, the vision may not be affected, but the ophthalmoscope shows a haziness of the fundus, an inability to make out the fine details, which is the first sign of cloudy swelling. The interference with vision depends on the location of the lesion, whether in the macula or only in the areas surrounding it. The condition clears up entirely if it does not go beyond the stage of cloudy swelling. In primiparas this haziness of the retina is easily detected if the pupil is widely dilated, and this haziness is the first indication of retinitis; but if there has been previous eye trouble, it probably can not be made out so early. Conservation of vision as

well as life demands prompt induction of labor.—*The Journal of the American Medical Association.*

THE ETIOLOGY OF MONGOLIAN IMBECILITY.

Why the Mongolian? This is a question which has puzzled scientists for years. Dr. Herman discusses the subject rather fully from theories already put forward.

Worry, emotional shock, and diseases of the mother during pregnancy have always been popular theories which help, especially the laity, to explain the occurrence of their unfortunate issue. No scientific data, however, is obtainable to substantiate such theories.

Immaturity or exhaustion of the generative organs, especially of the mother, is another theory rather popular with the profession. A certain percentage of the mothers of mongols are very young or very old. In about one-third, the mother is over 40 years old. However, there remain the two-thirds in which the mothers are between 20 and 40. Large numbers of perfectly normal children are born to mothers over 40, and there is no evidence to show that such children are usually weaker physically and mentally than those of preceding pregnancies.

There may have been pressure on the basal ganglia, as shown by the short antero-posterior diameter of the skull, the flat occiput, and the diminished weight of the cerebellum, pons, and medulla. The primary factor is not the deformity of the skull, but the incomplete development of the brain.

Congenital syphilis is considered a strong etiological factor with many observers, but the consensus of opinion is that syphilis is not responsible for the great majority of cases.

The most suggestive evidence concerning the cause of mongolian imbecility is a unit character and recessive, following the Mendelian principles. A number of charts are shown by Dr. Herman to illustrate and substantiate this theory. He concludes that there is no positive proof that worry, emotional shock, illness during pregnancy, or congenital lues are important factors in the causation of mongolian imbecility. The evidence that the condition is a unit character and recessive, although not conclusive, is certainly suggestive.—*The Virginia Medical Semi-monthly.*

Editorial

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All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

COMPULSORY FOOD CONSERVATION.

Among our allies, food tickets and allowances have been in effect almost since the beginning of the war. Those behind the lines, as well as those in the trenches, for more than three years, have had to deny themselves all the luxuries and many of the necessities of an equalized diet. We now realize that our allies were fighting for our safety, as well as their own from the first day of the war. Without our help the German arms may have been crowned with victory, and even with our help, no one today knows whether the final terms at the close of the war will be such as to insure a lasting peace. It, therefore, behooves us to do everything possible to help our allies, and to help our soldiers at the front and their dependents left behind.

Red Cross donations, donations to the Army Y. M. C. A., to the starving Belgians, to the French Heroes Fund, purchase of Liberty Bonds and all other expenditures of money to help our allies and our own government, are truly patriotic, but no one of these financial expressions of patriotism means so much as would a general compulsory conservation of food, such as can only be obtained by food allowances. Boys who are to protect our shores from the invasion of a foreign foe are chosen from all walks of life; many of them have been accustomed to the best money could buy; on the other hand many are leaving dependents behind, who had difficulty

in obtaining food enough even with the head of the family at home and at work. These boys are to offer their lives and to suffer the hardships of modern war that we may live in comfort. Some of them volunteered for the adventure, some from a sense of duty, and some of necessity. Regardless of why they are in the army, it is no more than we owe these boys and their dependents to deny ourselves some of the luxuries and necessities they can not obtain.

Food conservation speeches and demonstrations reach a small number of people and are heeded by an even smaller number; they can never affect the great mass of American people. Just as it took a draft law to raise our national army, so will it require a food law to conserve our food and keep down the prices. We owe it to our allies and to our own army to enact and enforce such a law. It would be our greatest expression of patriotism; it would cheer our boys at the front to feel that those who remain at home are willing to share some of the hardships of this war; it would bring a full realization of our part in the war to the hearts of the American people; it would force the wealthy class into a better realization of the suffering of the poor, who at the present time can hardly afford to buy the food necessities; by conserving the food supply it would tend to lower prices as well as allow more food for our allies, and in this way give the poorer of the dependents left at home, a chance to live comfortably until the provided returns; it would be one more blow to the vaunted Prussian Militarism, and finally it would show that the United States is heart and soul and really united in this war for Liberty and Democracy.

W. T. B.

SUICIDE MORE PREVALENT AMONG MEN THAN WOMEN.

The figures show that the suicide is more than twice as frequent as a cause of death among males than among females. This is true at all periods of life except at the ages of 15 to 19. It is remarkable that the change from youth to adult life should disturb the mental life of females so much more than that of males. The same conditions are found to prevail among the white and the colored races. After early adolescence, the white female suicide rate remains prac-

tically stationary, never varying very much from about 11 per 100,000. On the other hand, the white male suicide rate increases with each age period. The rate is highest at the ages 65 to 74, when it is over 80 per 100,000. Suicide is then a very common cause of death, nearly five times as prevalent as the age period 20 to 24.

YOUNG PHYSICIANS, YOUR OPPORTUNITY.

Never again in the history of medicine in this country will such an opportunity be afforded you to serve your country as well as the best interest of yourself.

The experience which you will gain by being commissioned in the Medical Reserve Corps and seeing active service, will be worth more to you in a professional way than you could acquire in years of practice in civil life.

The pay granted to officers in the Medical Reserve Corps is sufficient not only to cover all needs, but enable you to lay aside a comfortable balance, and while the older men in the profession have come forward, it is to the younger men that the greatest benefits accrue.

The experience will prove broadening both professionally and mentally. With this experience and the thought that you have served your country in time of need, you will return to civil life and receive the further benefits from your patients, friend and acquaintances, always accorded to one who has been so prominently individualized as this opportunity will afford.

In October, the senior editor of this Journal, Dr. C. S. Briggs, was appointed Chief Surgeon of the Tennessee Central Railroad and Briggs' Infirmary was designated as hospital for patients of that system.

TO OFFICERS OF THE MEDICAL RESERVE CORPS U. S. ARMY INACTIVE LIST.

Word received from the Surgeon General of the U. S. Army conveys the information to officers of the Medical Reserve Corps of the

United States Army, inactive list, that assignment to active duty may be delayed, and that they are advised to continue their civilian activities, pending receipt of orders. They will be given at least fifteen days' notice when services are required.

The delayed appearance of the November number of the Journal is due to a fracture of the anatomical neck of the humerus sustained by the editor, Dr. C. S. Briggs, in a fall caused by missing a step on the stairway of his office, November 5th. Repair now is nearly complete and he will soon be ready to resume all his work.

We take great pleasure in presenting the translation of the most excellent paper on Cancer in this number of the Journal and offer an apology for having to make two installments, but feel sure that the value of the article will make ample atonement for that inconvenience to our readers.

Resolution adopted unanimously by the Clinical Congress of Surgeons of North America at Chicago, October 25, 1917:

WHEREAS, The experiences of the nation convince us of the necessity for Universal Military Training, to furnish qualified men for defense, to strengthen manhood and mental poise, and to make for a more efficient citizenship; and

WHEREAS, We believe it will demonstrate youth and furnish discipline, while developing physical force and endurance, and will produce better fathers and workers for the ranks of peace; therefore be it

Resolved, That the Clinical Congress of Surgeons at its eighth annual session urge upon Congress at its eight annual session the passage of a measure along the general lines of the Chamberlain Bill for Universal Military Training, and that the cantonments now used by the National Army be utilized, if possible, for such work.

We hope our subscribers will remember that we are nearly at the close of the year and that they will not forget to send in what they

owe for subscription and order the subscription continued for another year. At least notify us to continue sending the Journal or not, as that will save us a good deal of trouble.

DO YOU KNOW THAT

Light promotes cleanliness?

A clean mouth is essential to good health?

Physical training in childhood is the foundation of adult health?

The U. S. Public Health Service issues publications on hygiene and sanitation for free distribution?

Isolation is the most efficient means of controlling leprosy?

Headache is Nature's warning that the human machine is running badly?

Bullets may kill thousand—flies tens of thousands?

Obesity menaces longevity.

The following resolutions were adopted unanimously at a meeting of Committees from all states (except Maine and Delaware), held in the Congress Hotel, Chicago, October 23, 1917:

WHEREAS, The experience through which the United States is now passing should convince every thoughtful person of the necessity for universal training of young men, not only for the national defense in case of need, but also to develop the nation's greatest asset—its young manhood—in physical strength, in mental alertness, and in respect for the obligations of citizenship essential in a democracy; therefore, be it

Resolved by the State Committees of the Medical Section of the Council of National Defense that they strongly urge the adoption by our government at this time of a comprehensive plan of intensive universal military training of young men for a period of at least six months, upon arriving at the age of nineteen years and that this body also support the movement to secure the introduction into public schools of adequate physical training and instruction;

Resolved, That the members of each State Committee immediately take active steps to insure public support for the sub-

ject of these resolutions through the newspapers, through public meetings and through the appointment of committees in each county; also that copies of these resolutions be forwarded to the Senators and Members of Congress in their respective states, with a personal request that favorable action be taken at the coming session of Congress upon a measure following the principle of the Chamberlain Bill and to become operative as soon as the army cantonments are no longer required for the training of the forces in the present war;

Resolved, that each State Committee from time to time report to the Medical Section of the Council of National Defense as to action and progress secured in their several states.

WARNING AGAINST MEDICINE FRAUD.

Washington, D. C.—Imposters posing as Federal employes are trying to sell rheumatism and other “cures” which they represent to the gullible as being made by the United States Government, is a warning issued today by the Bureau of Chemistry, United States Department of Agriculture. Letters received from residents of Minnesota and South Dakota tell of such misrepresentations by agents of the United States Medical Dispensary” or “Dr. Henry Post,” Washington, D. C. The packages and labels guaranteed for \$20 “cures” for various ailments but failed to give any address of those who are to refund. Federal inspectors have been unable to locate any such concern or doctor in Washington or elsewhere.

The label contains a serial number and states that the “product” is “guaranteed by Dr. Post under the national pure food and drugs act of June 30, 1906.” The number given is that assigned to a concern which has never made such a product and has no connection with Dr. Post or a Dr. George Lawrence of South Dakota who, according to a correspondent, represented himself as both Dr. Post’s agent and an employe of the United States Government.

The department’s inspectors can not find that the product is being shipped in interstate commerce, which would bring it under the Food and Drugs Act and are of the opinion that the agents carry it personally to escape detection by the Federal authorities. The de-

partment therefore has brought the matter to the attention of various State and city food and drug officials with the view of securing their co-operation in detecting and preventing such fraudulent practices.

Kindly note the following change of address: The Southern California Practitioner from 3438 Siskiyou Street to 133 South Hobart Blvd., Los Angeles, Cal.

MEMORANDUM.

To Editors of Medical Journals in the United States:

It is the utmost importance that the medical profession throughout the country be kept informed in regard to the activities of the Surgeon General's office, the Medical Section of the National Council of Defense in Washington, and the work the State Committees.

There should be no difficulty in getting this information by writing directly for it.

The enclosed reprint gives specific and authentic information up to September, 1917.

Since then the situation of the Medical Reserve Corps in regard to numbers has become less acute. About 14,000 are commissioned and 7,000 are in the process of being commissioned.

Twenty-one thousand medical officers are about sufficient for an army of 2,000,000 men.

The indications are that we will need a much larger army, and the medical profession of this country will be tested to its utmost capacity.

At a recent meeting in Chicago of the State Committees of the National Council of Defense it was decided to petition Congress to create a Reserve Medical Officers Reserve Corps. When this is created every qualified physician at any age will be given the opportunity and honor to volunteer his services and be enrolled. After this every physician will be in a position either to wear the insignia of honor

of the Reserve Medical Officers Reserve Corps or the uniform of active service in the Medical Officers Reserve Corps.

From the new Reserve Medical Officers Reserve Corps the Surgeon General will be able to select medical officers as they are required for service in France or at home.

The present great problems are: The training of physicians in civil practice for military duty.

The protection of the army in training in this country from venereal infection.

The future great problems when our wounded begin to return to this country will be the reconstruction and re-education of the crippled soldiers.

The great and only necessity of the present is the successful carrying on of this war.

The medical journals of this country should do all in their power to keep the profession properly informed and to stimulate them for this great endeavor.

JOSEPH COLT BLOODGOOD,

Chairman of Committee on Preparedness of the Southern Medical Association.

THE SECRETARY OF THE TREASURY, WASHINGTON.

To the Officers and Enlisted Men and Women of the Army and Navy of the United States and Their Relatives:

The Secretary of the Treasury, through the Bureau of War Risk Insurance, has been charged with the administration of the War Insurance enacted by the Congress as a measure of justice to the men and women who have been called to give their lives, if need be, in the service of their country.

I wish to acquaint you with the benefits and privileges which your Government has placed at your disposal. It is essential that you and your families at home should know of your and their rights under this law in order that full advantage may be taken of them.

To care for the wife and children of the enlisted man during his service, the War Insurance Law compels him to contribute up to

one-half of his pay for their support. The Government, on application, will generously add to this an allowance of from \$5 to \$50 a month, according to the size of the family. Moreover, if the enlisted man will make some further provision himself for a dependent parent, brother, sister, or grandchild, they may be included in the Government allowance.

If (as the result of injuries incurred or disease contracted in the line of duty, an officer or enlisted man or an Army nurse should be disabled, provision is made for compensation of from \$30 to \$100 a month to him, and, should he die, compensation of from \$20 to \$75 a month will be paid to his wife, his child, or his widowed mother.

In order, however, fully to protect each person and family, Congress has made it possible for every soldier, sailor and nurse to obtain life and total-disability insurance. This insurance applies to injuries received while he or she is in the service or after he or she shall have left it.

Exposure to the extra dangers of war makes the cost of life insurance in private life insurance companies prohibitive. It was, therefore, plain duty and obligation for the Government to assume the risk of insuring hundreds of thousands of our soldiers and sailors who are making the supreme sacrifice. Under this law, every soldier and sailor and nurse, commissioned and enlisted, and of any age, has the right, between now and February 12, 1918, to take out life and total-disability insurance up to \$10,000 at very low cost, with the Government without medical examination. This right is purely optional. The soldiers and sailors are not compelled to take this insurance, but if they desire to exercise the right, they must do so before the 12th of February, 1918. The cost ranges from 65 cents monthly, at the age of 21, to \$1.20 monthly, at the age of 51, for each \$1,000 of insurance. This is a small charge on a man's pay—small in proportion to the benefits it may bring. The premiums will be deducted from his pay, if he desires, thus eliminating trouble on his part.

To provide adequate protection until February 12, 1918, during the period when the soldiers and sailors are learning the details of this law, the Government automatically insures each man and

woman, commissioned or enlisted in the military service of the United States. It pays the man \$25 a month during total permanent disability; if he dies within 20 years, it pays the rest of 240 monthly installments of \$25 each to his wife, child, or widowed mother.

I desire to call the provisions of this just and generous law to the attention of our officers and enlisted men and women so that they may not be deprived of their rights through lack of knowledge. Full information may be obtained from the Bureau of War Risk Insurance of the Treasury Department, Washington, D. C. I earnestly urge that the officers of the Army and Navy give to the men under their command all possible aid in helping them to understand fully the benefits that this insurance may bring to their families and the small cost at which it may be obtained. ,

This is the greatest measure of protection ever offered to its fighting forces by any nation in the history of the world. It is not charity; it is simply justice to the enlisted men and women and to their loved ones at home, and each and every one should promptly take the benefits of this great law.

W. G. McADOO,
Secretary of the Treasury.

HOME CANNED FOOD SAFE.

No Need to Fear Botulism in Properly Prepared Products.

Washington, D. C.—The United States Department of Agriculture today issued the following statement prepared by the bacteriologists of its Bureau of Chemistry and the States Relations Service:

“There is no danger that the type of food poisoning known as ‘Botulism’ will result from eating fruits or vegetables which have been canned by any of the methods recommended by the United States Department of Agriculture, provided such directions have been followed carefully. It is possible that in a number of instances the directions were not strictly followed and that spoilage has occurred. Of course, extreme care should be taken to ascertain before

eating canned goods of any kind whether they are in good condition, and if they have spoiled they should not be consumed.

"In case of any doubt as to whether the contents of a particular can have spoiled, the safest plan is to throw it away, although all danger of Botulism may be avoided by boiling the contents of the can for a few minutes, since the *Bacillus botulinus* and the toxin or poison which it produces are killed by such treatment. No canned food of any kind which shows any signs of spoilage should ever be eaten. In the cold pack method of canning given out by the Department of Agriculture, only fresh vegetables are recommended for canning, and sterilization is accomplished by the following processes: cleansing, blanching, cold dipping, packing in clean, hot jars, adding boiling water, sealing immediately, and then sterilizing the sealed cans at a minimum temperature of 212 degrees Fahrenheit for one to four hours, according to the character of the material. Since the spores of *B. botulinus* are killed by heating for one hour at 175 degrees Fahrenheit (according to Jordan's 'Bacteriology' and other recognized textbooks) there is no reason to believe that the *botulinus* organism will survive such treatment."

TREASURY DEPARTMENT, WASHINGTON.

November 10, 1917.

To the Nashville Journal of Medicine and Surgery:

On behalf of the Woman's Liberty Loan Committee I want to extend to you our heartfelt thanks and appreciation for the splendid co-operation you gave us in obtaining nation-wide publicity during the Liberty Loan Campaign just closed.

Yours very truly,

MRS. WM. G. McADOO,

Chairman Woman's Liberty Loan Committee.

Reviews and Book Notices

Impotence and Sterility with Aberrations of the Sexual Function and Sex-Gland Implantation—By Frank Lydston, M.D., D.C.L. Price \$4. Sold by subscription Only. Sent postage prepaid on receipt of Subscription Price. The Riverton Press, 25 E. Washington St., Chicago.

This work of Dr. Lydston's should be very popular with the profession. The subject is one of special interest and the style is in keeping with this author's power. His historic references hold one's attention while he reviews old theories, leading to the newest speculations. His teachings seem to us sound in every respect. The portion of the book allotted to sex-gland implantation is particularly interesting and satisfactory, for no one is better prepared to treat on this subject, Dr. Lydston being a pioneer in this work.

Publisher's Department

Pepsin is undoubtedly one of the most valuable digestive agents of our *Materia Medica*, provided a good article is used. "Robinson's Lime Juice and Pepsin" (see advertisement in this issue) we can recommend as possessing merit of high order.

The fact that the manufacturers of this palatable preparation use the purest and best pepsin and that every lot made by them is carefully tested before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from Pepsin.

THE CATHETER.

The Catheter unskillfully or carelessly employed is a dangerous instrument, and before its use it is better where there is retention of urine to resort to all palliative measures first, as hot sitz baths, suppositories of belladonna and opium, hot rectal injections and colonic flushings, and to the administration of sanmetto in teaspoonful doses every hour for first three or four hours and then every two hours until reasonable time for relief. Never withdraw the entire amount of urine at once, as it might be followed by hemorrhage from the bladder or kidneys or a complete suppression of urine ending fatally. Always follow urethral or bladder instrumentation with irrigation or injections of the milder silver salts, and the administration of sammetto to soothe and relieve the irritation or inflammation of the urinary canal.

In inflammatory diseases of the skin, especially where volumetric analysis shows defective urinary elimination, sanmetto will be found a useful remedy, owing to its direct action on the kidneys.

COD LIVER OIL IN CHRONIC BRONCHIAL DISORDERS.

It will be found that many of the chronic bronchial inflammations respond quickly to the administration of Cord. Ext. Ol. Morrhuæ Comp. (Hagee). The reasons for this are the definitely selective influence this possesses to add strength to the tissues in general, the combination of properties serving in efficient manner in overcoming the chronic bronchial inflammations so common during the winter. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is of exceptional palatability, a feature that makes it of unusual value with women and children. Its use should be continued throughout the winter in those susceptible to bronchial and pulmonary disease.

POST OPERATIVE QUIET.

For the purpose of relieving nervous irritability and bringing about rest following a serious operation, the surgeon has at his command in Pasadine (Daniel) a sedative agent of the greatest usefulness and one free from evil effects. Pasadyne (Daniel) is merely a distinctive name for a pure concentrated tincture of *passiflora incarnata* and is a product that has stood the test of nearly forty

years. The advantages possessed by Pasadyne (Daniel) lie in its therapeutic potency and freedom from the properties that cause depression. Surgeons may depend upon it to secure for their patients the rest needed. A sample bottle of Pasadyne may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

"I have prescribed large quantities of tongaline, doing so nearly every day for many years with most satisfactory results, and in some cases the successes have been really phenomenal."

AN ESSENTIAL POINT IN THE THERAPEUTICS OF LATE SYPHILIS.

An essential point in the therapeutic management of late syphilis is the administration of a reliable preparation of the iodides, through which the patient is insured a complete iodine action, and which at the time does not cause any distressing after-effect.

With many extemporaneously compounded preparations of the iodides the initial effect is favorable but shortly the evil manifestations of iodism become evident, and the result is that the preparation must be discontinued to the patient's disadvantage.

Iodia (Battle) offers the physician a most excellent means of giving the iodides, and makes it possible to secure high iodine action with minimum untoward effect. This happy feature of Iodia (Battle) is the result of a well-balanced formula and the employment of the purest ingredients, factors of the utmost importance. Try Iodia (Battle) in late syphilis and note results.

The Obstipation-Status-Autotoxemia Syndrome is complex in its etiology as well as in its nosology. Anything that interferes with the calibre of the gut, or with the free passage of intestinal contents through the tube, results in a difficult passage of the bowel contents along the intestinal canal—Obstipation.

This may be ptosis, or displacement of the gut at some point, a kink, abnormal sagging of suspensory structures, or dislocation of some part of the tube. This, together with abnormal dryness of lack of lubricating mucus, due to disturbance of the intestinal mucous glands, results in stagnation of the current, stopping in many instances, a damming back of the current—Stasis. or chemical action, the production of an abnormal amount of toxins of unusual power.

As a result of these influences, opportunity is given for increased bacterial virulence, irritation and disturbance of the filtering or protective action of the mucous membrane and resulting absorption of increased quantities of poisonous material—auto-toxemia.

As a result of so many factors working more or less interdependently, is the establishment of the Syndrome—a complex group of many symptoms, that may simulate almost any disease or diseased condition met with in medicine.

Furthermore, these conditions, if allowed to go uncorrected, may and often do, aggravate or cause serious, even fatal disease.

The ideal treatment for such conditions is lubrication. The ideal intestinal lubricant is interol because it comes closer to Nature's own lubricant—mucus—in that it lubricates without stimulation, irritation or enervation. Being non-absorbable, it lubricates "all the way." On account of its characteristic *lubricating body* it efficiently mixes, spreads and clings in the intestinal tract, and unless too much is administered it does not separate from the feces it lubricates and keeps soft. It does not "ooze"—"per se."

NASHVILLE JOURNAL

— OF —

MEDICINE AND SURGERY

CHARLES S. BRIGGS, A.M., M.D., Editor.
W. T. BRIGGS, B.A., M.D., Associate Editor.

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No. 12

Original Communications

THE ULTIMATE RESULTS OF THE OPERATIVE TREATMENT OF MAMMARY CANCER.*

BY DR. HANS LINDENBERG,
Assistant Physician of the Clinic.

(Translated by W. T. Briggs, M.D.)

Concluded from last month.

Our treatment of mammary cancer during the time under consideration has been very radical and will, I presume, remain so for a long time. During the last few years the Roentgen rays have been used after operation but our experience is not yet great enough to recognize with certainty any effect from the rays. The indications for operation were rather comprehensive, only those cases having demonstrable internal metastases and some of the cases of cancer *en cuirasse* being refused operation. How many were denied operation I can not say, since the refusal was made in the private consultation hour at the Polyclinic. Neither ulceration nor palpable supra-clavicular glands were considered contraindications. Kuttner's view, that the endothoracic glands are already involved in every

*From the Surgical Clinic of the University of Rostock—Geh. Medizinalrat Prof. W. Muller.

case in which the supraclavicular glands are palpable, has been disproved by Finsterer, who found no evidence of such metastases in three postmortem examinations. Moreover Finsterer reports three such cases who have lived four years without recurrence; Gulecke and Pilcher also report cases; however, these far-advanced cases are usually incurable. Advanced age in itself was not considered a contraindication, indeed twenty-five of our cases were over 65, and 6 over 70. However, marked cachexia oftentimes limited the extent of the operative procedure. For instance, supraclavicular glands were palpated in 21 cases, but removed in only 14. The routine removal of the supraclavicular glands as advocated by Halstead, was not our practice.

In regard to this we must agree with Kuttner in the opinion that the supraclavicular glands are but one of the steps by which cancer spreads, and that the operation, however radical it may be, but seldom checks the further spread with certainty, whereas the dangers of the operation are certainly increased. In our cases, therefore, the supraclavicular glands were removed only when suspiciously palpable and the general condition of the patient promised success. Since the middle of 1904, the operations at the Rostock clinic have been performed according to Rotter's technic: removal of the affected breast and a large area of skin along with the contents of the axilla and both pectorals; oftentimes Thiersch skin grafts were used to close the skin defect. One hundred and twenty cases were operated in this manner. However, even before then the entire pectoralis major or a strip of it was removed. In five cases the fascia only was removed.

While most modern authorities advise the radical operation, others advise careful choice of operation. Greenough frankly says: incomplete operations give far better results in mild cases than do the radical. The statistics of Heurtaux in Nantes, who merely removes the breast and cleans out the axilla and of whose 284 operated cases, 123 or 43.3 per cent were still alive after four years, seems to bear him out in this opinion. Warren gives two series of fifty operated cases; in series I only the pectoral fascia (after Volkmann), was removed; in series 2, Rotter's technic was followed. In series 1 he obtained fourteen cures; in series 2 only twelve cures.

What were the results in our 1283 cases?

From the operation itself not a single patient died, but thirteen died as a result of the operation. That is 7.1 per cent. This is a rather large percentage, larger than we usually find in modern statistics. Dollinger gives 1.5 per cent, Mauclore 2 per cent, Wunderli 2.5 per cent, P. Schmidt 3 per cent, Finsterer 5.2 per cent, H. Schmidt 5.2 per cent, Schwarz 6.9 per cent, Dietrich 7.6 per cent, and Salomon, 0.92 per cent.

This may be due to the fact that the operation in the Rostock clinic is performed even in far advanced cases regardless of the effect on statistics. Among the operative deaths was one woman with diabetes and two with well-advanced organic heart disease. In another case both breasts were carcinomatous and the left supraclavicular glands were removed. A septicæmic case died from decubitus of the sacrum, while the operation wound healed per primam. The fatal cases were:

Erysipelas bzw sepsis.....	4
Embolus	3
Pneumonia	1
Apoplexy	1
Diabetes (coma)	1
Heart weakness	1
Myodegeneratio cordis	1
Endocarditis	1

Of these fatalities, four occurred in 1902 and five in 1907, while the remaining four were spread over four years. This alone should demonstrate how chance can influence statistics if the total number of cases is small.

The results in the other cases I have learned in the following manner: A small number who lived in Rostock and who returned to the clinic, I was able to examine myself. I also sent a questionnaire to the physicians who had sent the patients for operation. This brought many answers, some of which went into detail and for this I wish here to express my thanks to my confreres as well as to the friends and magistrates who have willingly helped me in cases where information through the physician could not be ob-

tained. In this way I received satisfactory information in 176 cases; in most cases not only in regard to the death, but also its cause and the condition before death. Of seven patients I could learn nothing, partly because the particulars were inexact, partly because they had emigrated from Mecklenburg.

Naturally, the main question is, when can a cancer of the breast be considered cured? or, when can one at least have some reasonable hope that the disease is absolutely checked? We all know what Volkmann said: "One year after the operation we may hope, after two years, however, we may have some assurance that there will be no recurrence". As a matter of fact experience teaches that by far the greatest number of recurrences as well as metastases appear in the first year after operation, a much smaller number in the second year, but even in the third year there are a certain percentage of recurrences and metastases; because of this, most authorities, even as long ago as the eighties of the last century, decided that three years must have passed before a cancer case should be considered cured. During the last two decades it has been suggested by different men—Steinthal, Greenough—that a case be considered cured only after five years have passed without recurrence. Mauclore even goes so far as to hold that most recurrences occur after the third year, but in this opinion he stands alone.

Steiner, however, says that with his cases it made comparatively little difference whether the time limit were three or five years. In order to throw some light on this question I have tabulated our results according to both the three and five year period. That cure is not absolutely certain even after five years, the many known cases of late recurrence bear ample testimony. We have had four cases of late recurrence in the form of metastases after the five year period; one of these occurred after seven years; another after nine years and in both cases the metastases were in the vertebral column. Forster had one recurrence respectively after 10, 11, 13, 16, and 20 years; Verneuil one even as late as the 33d year. Labhardt made an exhaustive study of this phase of the subject. Usually the late recurrences show up in other organs, and without postmortem examination and painstaking histologic study, there is no way of telling

whether the tumor is metastatic or a new neoplastic growth. In this respect two of our cases were interesting.

1. Frau O. was operated in 1901 for a cancer of the right breast. In 1913 she returned with a tumor of the coccyx which microscopically proved to be a spindle-cell sarcoma.

2. Frau D. in 1902 had a carcinoma simplex removed. In 1911 a squamous-cell carcinoma developed on the cervix uteri.

In these cases the tumors were histologically different types of malignant growth, certainly not metastases.

I would like to mention just here that we have had several cases which had previously had benign tumors removed from both breasts.

Seventy-seven or 42.1 per cent of our operated cases had recurrence during the first year. The true significance of this percentage can be realized only after subtracting from the total number, the number of those who have had no recurrence; this latter class includes those who died as a result of the operation or from some intercurrent affection, as well as those rated as cured and those whose fate is not known.

There are 108 cases which are either dead or who have recurrences if alive. Seventy-seven or 71.2 per cent of these recurrences took place in the first year.

12 or 11	per cent in	2 years.
9 or 8.3	per cent in	3 years.
4 or 3.7	per cent in	4 years.
2 or 1.8	per cent in	5 years.
1 or 0.9	per cent in	6 years.
1 or 0.9	per cent in	7 years.
1 or 0.9	per cent in	8 years.
0 or 0	per cent in	9 years.
1 or 0.9	per cent in	10 years.

Almost three-fourths of all recurrences appeared in the first year and more than four-fifths in the first two years. Volkmann was not far from correct. There is no doubt but that the chances of permanent cure increase with each additional year. There are only three-fourths as many recurrences in the third as in the second year; in the fourth there is only a scant half as many recurrences as in the

third, and again about half as many in the fifth as in the fourth year. Of 108 recurrences, six took place between the third and fifth years. Later recurrences are very rare.

I will now discuss in detail my statistics. I will rate the cures according to both the three and five year period. According to the former period 183 cases will be considered, according to the latter, 153. The cases can be divided into two groups:

1. Those still living after three or after 5 years.
2. Those still without recurrence after three or five years.

How to deal with those who have died of some intercurrent illness is an important question from a statistical point of view. They cannot be counted with the recurrent cases and they certainly should not be counted among the cured unless they lived at least longer than three or five years without recurrence and died from some disease diagnosed other than carcinoma by a physician.

Taking up first the three year cure class our figures are as follows:

Of	183 cases
No trace of	7 cases
Dead as result of operation.....	13 cases
Dead of some intercurrent disease.....	5 cases
Dead of recurrence or metastases in 1 year.....	54 cases
Dead of recurrence or metastases in 2 years.....	15 years
Dead of recurrence or metastases in 3 years.....	12 cases
Therefore are living after three years....	77 or 42.1 per cent
Living but with recurrence.....	17

Consequently there are living without recurrence after three years 60 or 32.7 per cent.

For the five year class we can consider only those cases operated previous to and including 1908 or.....	15.3
No trace of	7
Dead as result of operation.....	12
Dead of some intercurrent disease.....	8
Dead from recurrence in the first 3 years.....	67
Dead from recurrence in the first 4 years.....	6
Dead from recurrence in the first 5 years.....	5
Therefore are living after 5 years.....	48 or 31.4 per cent
Living but with recurrence.....	5

Consequently there are living without recurrence after 5 years 43 or 28 per cent.

Of the 43 cures in this group, 3 had recurrences shortly after the operation, which were removed and did not recur within the five year limit.

If merely the figures are considered, the statistics show the difference between the 3 and 5 year cures is only 5 per cent. But we must not lose sight of the fact that the statistics of the five year group must include 12 of the 13 operation deaths, that all those not traced and a very much larger number dying of intercurrent diseases must also be included. I might have found still other sources of error from a statistical point of view, had I made the attempt. Suffice it to say, the real difference amounts to 3 per cent at most; so taken all in all it makes but little difference whether the 3 or 5 year period is used. Certain it is that none of our patients are sure of no recurrence; even among those who lived longer than 5 years, 3 died later of cancer and one still lives but with metastases. That means 9.3 per cent. So we must modify Volkmann's dictum as follows: After 2 years we can hope, after 3 years we can hope more, after 5 years we can have some assurance that the growth will not recur.

Let us now consider in more detail the cured cases. The first question is: were those patients we operated successfully of any special type, was the disease less advanced, finally was the type of neoplasm less malignant. It is indeed a true saying, "There is a difference between 'cancer' and 'cancer'; and in comparing the cancers according to the clinical stage and the microscopical findings, we were again impressed with the truth of this saying.

The patients who now have no recurrence, to which group I add those dead of some intercurrent illness who lived three years without recurrence, number fifty and can be separated into groups as follows:

1. To the first stage (movable tumor, no glandular involvement....24
2. To the second clinical stage (glandular involvement, tumor, movable; or no glandular involvement but the tumor fixed)....22
3. To the third clinical stage (glandular involvement and tumor fixed) 4
4. To the fourth clinical stage (supraclavicular glandular involvement) 0

The full significance of these figures is grasped when we compare them to the whole number in each group.

Stage 1.	35 cases.....	24 cures or 68.5 per cent
Stage 2.	81 cases.....	22 cures or 27.1 per cent
Stage 3.	53 cases.....	4 cures or 7.6 per cent
Stage 4.	14 cases.....	0 cures or 0 per cent

Therefore, if the cases comes to us in the beginning of the clinical development of the tumor (and this time does not necessarily correspond to the time the tumor has been present) there is a chance of a cure in 66 per cent of cases. If, however, the tumor has already reached the first stage of its spread through the body, our chances sink to less than 33 per cent, still further spread cuts our chances of cure to 8 per cent, and after the supraclavicular glands are affected our chances are nil. Not a single one of our cases with supraclavicular glandular involvement lived longer than 2½ years without recurrence. However, the above mentioned cures of such cases by Finister, Gulecke and Pilcher, will encourage us to continue to remove these glands, since a prolongation of life may thereby be obtained.

The histological diagnoses in our cured cases was:

Adenocarcinoma.....	10 cures from 31 cases or 32.3 per cent
Carcinoma simplex.....	24 cures from 96 cases or 28.1 per cent
Scirrhus.....	10 cures from 40 cases or 25 per cent
Medullary carcinoma.....	2 cures from 4 cases or 50 per cent
Colloid carcinoma.....	1 cure from 5 cases or 20 per cent

The last two percentages are naturally of little value.

Adenocarcinoma was the type most frequently found in the first stage; a comparison, however, between carcinoma simplex and scirrhus is very interesting. While 21 per cent of the simple carcinomata and only 10 per cent of scirrhus belonged to the first stage, and the former would seem to offer especially good chances of cure, yet we see that the cures are almost the same. Probably this is due to the fact that scirrhus often extends rapidly to the glands but for the most part grows slowly. Let us compare with the above some of the results of other operators. Halstead's figures also show that adenocarcinoma offers the best prognosis, since he obtained 75 per cent of cures with this type, 48 per cent with medullary cancer, 46

per cent and and 22 per cent respectively for localized and diffuse scirrhus.

With adenocarcinoma Warren had 66 2-3 per cent cures, but only three cases. Of 26 cases of carcinoma simplex 6, or 23 per cent were cured. With scirrhus he had 43 per cent cures. He is the only author who report a large number of medullary cancers; he had 40 with only 3 or 7.5 per cent cured. We can not compare the cures distributed according to type of growth in Salomon's cases to ours, since he studied the results from an entirely different standpoint. However, he also finds that adenocarcinoma offers the best prognosis and the cures is given in detail in only a few articles. The clinical condition of the patient counts most. Almost everywhere we find the statement that the largest percentage of cures occurs in cases showing no glandular involvement at operation. Some of these are as follows:

Author	Without glandular involvement	With involvement
Salomon	85 per cent	.....
Villars and Monniquaud	71 per cent	21 per cent
Halstead	70 per cent	24 per cent
Hildebrand	34.6 per cent	18.4 per cent
Gebele	99 per cent	.....
Sprengel	20 per cent	9 per cent
Steinthal	69-85 per cent	26.5-32 per cent

Furthermore, the authors who do not give the exact figures, still emphasize the better prognosis in cases without glandular involvement. This advantage can not be counterbalanced by the most radical operation in advanced cases.

I would now like to discuss on a basis of the material at our clinic whether as a rule the radical operation is an improvement. Two articles, one by Stephan the other by Schroeder, discussing the cases in the Rostock Clinic from 1875-1900, have been published. In all there were 347 cases. In the first 50 cases, discussed in Stephan's article and operated while Trendelenburg had charge of the clinic, as a rule only the breast was removed, the axilla being cleaned only when the glands were palpable. There were 8 cures or 16 per cent, and in 5 of these the axilla was not invaded at operation. (Another demonstration of the prognostic significance of axillary involve-

ment.) Marelung then commenced the routine dissection of the axilla and in addition removed the fascia of the pectoralis major and Garre went further in that he removed a superficial layer of this muscle. Schroeder's statistics show 21.5 per cent 3 year cures. It is but natural to attribute this 11 per cent increase in cures to the regularly carried out more radical operation. Most of the cases tabulated by Schroeder occurred after the dawn of antisepsis; only in the first 50 cases was the mortality greater than ours, e. g. 10 per cent. Later it was only 4.6 per cent. The better success was probably due to an improved technic. The above comparison is significant since the same class of material was treated.

Now I would like to discuss an objection to the operative technic of Rotter, namely, that the usefulness of the arm is impaired. This point was incorporated in my questionnaire and in almost every case the reply was explicit. The patients who could not use the arm suffered for the most part from an œdema which retarded the return flow of the lymph and increased the weight of the limb. Of the 60 three year cures, only four suffered from limitation of motion of the arm. As to whether Rotter's technic gives better results in regard to local recurrences, I am sorry to say I can give no definite answer, since Schroeder does not take up this point in detail and our statistics are also defective in this respect. The answers of my confreres have not explicitly stated whether the recurrences were in the scar or near it. If only the cases are considered in which the answers were exact, we find that recurrences usually occurred in the scar. Recurrences occurred in the scar in 85 or 45 per cent of our cases. Seventeen patients had a metastasis as well as local recurrence. We have not been as successful in this respect as Halstead or Rotter, the former having local recurrence in only 11 per cent of his cases. Forty-three of our patients were reported with metastasis and six of these had several. The sites of the metastases were as follows:

General carcinomatosis	9
Pleura and lungs.....	12
Spinal column	4
Femur	4
Brain	2
Liver	8

Stomach	4
Bowel	2
Peritoneum	1
Other breast	3
Opposite axilla	3

We operated 52 patients for recurrence. In three of these cases the second breast and in three the opposite axilla was operated. Three cases lived more than 5 years after the operation for recurrence. One of these deserves special mention.

Twelve years Frau L. had a cancer of the left breast which was removed by the radical operation; in the first, and again in the second year after operation, local recurrences were removed. Four years ago after the first operation, carcinoma developed in the right breast. This was also removed by the radical operation. After this the patient lived seven years without recurrence. During the summer of 1911 a kyphosis developed in the lumbar portion of the spinal column; aside from some neuralgic pains in the legs there were no symptoms until April, 1913, when sudden paralysis of both legs supervened. Frau L. is still alive (March, 1914.)

In conclusion, I would like to briefly recapitulate our experiences.

1. Even though in any given case we can not say with assurance that cancer of the breast will not recur, still recurrences after the fifth year are rare. As a matter of fact there is a great probability of permanent cure even after the third year; 32.7 per cent of our patients lived longer than 3 years, 28 per cent longer than 5 years. Metastases developed in 4 cases even after the 5 year limit. This means that metastases occur in 9.4 per cent of the "cured."

2. The cases without axillary involvement offer the best prognosis (68.5 per cent cures). They are composed of (a) early discovered carcinomata of all types, and (b) cancers which spread slowly. Adenocarcinoma seems to be the most common growth under this head.

3. By using Rotter's technic, the end results have apparently been improved.

4. Every case should be operated as soon as possible.

I submit below for comparison the results of other authors whose figures are based on the three year limit; in cases where another

limit has been chosen, this is noted under "remarks" in the table. In cases where the names are marked with an asterisk, I have not given the author's figures but have changed them according to the suggestions of Cheyne. I agree with him in thinking it an error to compare the operative cures to the total number of operated cases in making up statistics and that only those cases which have lived more than three years, should be tabulated. Again, some authors who have successfully traced only a part of their cases, in making up their percentages, simply disregard those not heard from. Since in my opinion it is easier to get information about the living than about those who have been dead for some time, the omission of the above-mentioned cases makes the statistics too favorable. In cases where this error was especially apparent, I have made a marginal note.

The figures show by comparison that for the most part the results have improved during the last 20 years. The variety of the sources of the material, however, precludes the possibility of determining the average percentage of cures in breast carcinomata.

	No.	Per cent	Remarks
1. Winifarter, 1878, Zurich, Wien, Willroth.....	89	9.0*	
2. Henry, 1879 (Breslau, Fischer).....	86	15.0*	
3. Oldekop, 1879 (Kiel, Esmarch).....	171	14.0*	
4. Sprengel, 1881 (Halle, Volkmann).....	131	11.0	
5. Schmidt, H., 1887, (Berlin, Augusta Hosp., Kuster	132	15.0*	
6. Rotter, 1887 (Berlin, V. Bergmann).....	114	32.0	Only 42 cases considered.
7. Hildebrandt, 1887 (Cottingen, Konig).....	136	23.0*	
8. Schmidt, A. B., 1889 (Heidelberg, Czerny).....	83	9.6	On 5-year cure basis,
9. Fink, 1889 (Prag, Gussenbauer).....	253	16.7	9 per cent.
10. Poulsen, 1891 (Copenhagener, Stadt hospital).....	325	20.0	
11. Dietrich, 1892 (Strassburg, Lucke).....	95	16.0	
12. Horner, 1884 (Zurich, von Leonlein).....	144	19.4	
13. 1896 (Greifswald, Helerich).....	98	28.5	
14. Meier, 1896 Bern, Kocher).....	212	31.0	
15. Jones and Platt, 1895 (Manchester Royal Infrn.....	55	18.0	5-year cure, 11.5 per cent.
16. Cheyne, W., 1896 (King's College Hos., London	21	57.0†	
17. Mahler, 1900 (Heidelberg, Czerny).....	133	21.0	
18. Gebele, 1901 (Munich, Argerer).....	189	16.9	
19. Gulecke, 1901 ((Berlin, v. Bergmann).....	382	28.8	322 not traced.
20. Rosenstein, 1901 (Wien, v. Eiselberg).....	145	22.7	
21. Barker, 1900 (Univ. College Hosp., London).....	86	33.7	5-year cure, 16.2 per cent.
22. Schmidt, P., 1904 (Gottingen, Ect. Braur).....	162	28.3	53 not traced.
23. Meissl, 1904 (Wien).....	247	18.0	
24. Schwarz, 1905 (Graz, v. Hacker).....	186	14.5	
25. Schroder, 1905 (Rostock, Trendelenburg, Made-	347	21.5	
lung and Garre).....	183	14.0	
26. Wunderli, 1906 (Spital St. Gallen).....	108	16.0	
27. Steiner, 1906 (Budapest, Dollinger).....	233	20.2	
28. Scheu, 1907 (Breslau, v., Mikulicz).....	232	38.8	5-year cure, 32.3 per cent.
29. Halstead, 1907 (Johns Hopkins Hosp., Baltimore)	606	15.3	
30. Finsterer, 1907 (Wien, v., Hochenegg).....	376	18.0	40 not traced.
31. Greenough, 1907 (Mass. enl. osp., Boston).....	164	31.5	
32. Ochsner, 1907 (Augustana Hosp., Chicago).....	71	49.0	
33. Jacobson, 1907 (Syracuse, N. Y.).....	35	34.3	
34. Oliver, 1907 (Cincinnati, Ohio).....	42	33.3	
35. Cabot, 1907 (Boston, Private Practice).....	62	48.0	
36. Depage, 1908 (Belgium).....			

†In the original one name omitted opp. which stood figures 72-24.7 operation of Halstead.

Sabroe remarks that none of the functional tests for the kidneys, with stains, experimental polyuria or determination of the freezing point, have proved unfailingly reliable. They all overlook the vital point that the functioning of the kidneys at a given moment is not necessarily the criterion for their average functional performance. The most reliable information as to the functional capacity of the kidneys seems to be afforded by the urea content of the urine taken from each ureter separately. Positive findings are strong evidence in favor of operability, but the reserve is by no means the case. With surgical tuberculosis, there is always a possibility that the part of the kidney which it is proposed to remove may in reality be the very tissue responsible for the approximately normal functioning. Determination of the residual nitrogen in the blood as a test for the functional capacity of the kidneys, Sabroe declares, is of no clinical value in estimation of surgical kidney affections, as the rise in the

residual nitrogen content does not occur until so late in the disease that the clinical findings alone tell the story by that time. This conclusion is based on study of eight patients with tuberculous lesions in the urinary passages, ten with nontuberculous lesion given operative treatment, and eight with full details, filling thirteen pages, all confirming the disappointing verdict.—*The Jour. of the Am. Med. Asso.*

MEDICAL

DAMAGES FOR RESULT OF EXPOSURE TO COLD.

A physician was summoned to attend a patient on a cold night in March. The journey of about fifteen miles was made in a buggy. On returning, at an exposed point on the road he was prevented from crossing the railroad tracks by a standing freight train for about fifty minutes. He was in good condition when he stopped, but after about fifteen minutes he discovered that he was beginning to feel numb and chilled. By the time the train moved he had become so affected by cold that he was no longer able to grasp the lines, and was compelled to wrap them around his wrists and arms in order to control his team. As a result of the exposure he contracted articular rheumatism and suffered from this disease for a long time. In an action against the railroad to recover damages it was held that he was entitled to recover, and judgment for \$875 was affirmed.—*Med. Record.*

OBSTETRICAL

EARLY ECTOPIC PREGNANCY COMPLICATED BY APPENDICITIS.

Dr. Stein reported this case. He stated that the patient was 26 years of age. Her previous history was negative. She had had one child, seven years ago. On the day previous to admission to the Harlem Hospital she was suddenly seized with severe pain in the right lower abdomen, accompanied by pains in the vagina. Her

menstruations had always been regular up to the last time. She had finished her last menstruation about three weeks before. Examination showed bleeding from the vagina and the uterus somewhat enlarged and soft. There was marked tenderness extending over the right lower abdomen and up as far as McBurney's point. The right adnexa could not be definitely made out. There was no tissue discharged from the uterus. The patient was then transferred to the private building of the German Hospital for further observation. Being unable to make a definite diagnosis in two or three days, a probable diagnosis of ectopic pregnancy or subacute appendicitis was made, although the definite signs of appendicitis (rigidity of the muscles and rebound upon withdrawal of the hand after pressure) were not present. On the third day the patient had another attack of severe pain and operation was decided upon. A curettage preceded the laparotomy. Some apparently decidua tissue was removed. A transverse incision was made. Upon opening the abdomen the right tube was found to be about as thick as a thumb with blood oozing from the fimbrian end. There was marked adhesions with omentum, and also with the appendix. The right tube and ovary were lying very high on the ilium. This location seemed to be reason for their inability to locate and properly palpate the right adnexa. The right tube was then removed *in toto*, whereas the right ovary was left behind. The stump of the tube was secured with chromic catgut suture. The appendix which was adherent to the tube and was also subacutely inflamed and thickened with dilated vessels. It was removed and the stump buried with silkworm suture. The operation required twenty minutes.—*Medical Record*.

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at \$1.00 a year, to be always paid in advance.

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All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

THE DOUBLE STANDARD FOR THE SEXES.

Secretary Daniels, in an address at the recent Clinical Congress of Surgeons in Chicago, appealed to the profession "to end the false double standard of the two sexes."

He gave some very depressing statistics regarding the great prevalence of venereal diseases among enlisted men. For instance: "During the last statistical year men of the American Navy lost 141,387 days' sickness from a small group of absolutely preventable diseases contracted by sin." He went on to say the remedy was continence and that the medical profession should never cease preaching continence and further "Continence is no longer a matter of morals only, though it must be enforced as the cardinal doctrine of morals. It has come to be seen as having its base in the great law of Nature. New truths must take the place of ancient lies. *We know by the testimony of science that there is no foundation for a double standard for the two sexes.* The lie that has lived so long must be driven out by the truth."

We heartily agree with Mr. Daniels in his desire to eliminate venereal diseases and immorality from the Army and Navy and civil life as well. And practically all physicians agree with him.

However, we can not agree with Mr. Daniels in the statement that continence has its basis in the great law of Nature, since it is a scientific fact that most male animals, as well as man himself, mastur-

bate if so situated that sexual gratifications in the normal way is impossible. Furthermore, for our own enlightenment we would like to know where Secretary Daniels obtained "the testimony of science that there is no foundation for the double standard for the two sexes." Science teaches us that throughout the animal kingdom—and this includes man—the sexual instinct is greater in the male than in the female and that certain animals during the rutting season are absolutely under the control of the sexual instinct, even hunger becomes secondary. Even man himself experiences an annual periodical increase in sexual desires in the spring of the year.

Since science teaches that sexual desire is greater in the male, science must also grant that there is more reason why men should gratify this instinct.

But even if we deny this scientific truth, as apparently Mr. Daniels would have us do, there is still another reason for the double standard that we can not gainsay. This reason is the fact that only one of the two sexes can become pregnant. Civilization may change the instincts so that man and woman will be more on a par in sexual desire, but the highest imaginable civilization can not make man a child-bearing animal. Since this is so we must always expect a double standard in sexual matters. Even with sexual instincts so different in the two sexes as they are today, there would hardly be a question of a double or single sex standard were men subject to pregnancy as are women. Immoral sexual intercourse does not brand the male transgressor except perhaps with disease. And venereal disease is a secret disease. Unless unfortunate enough to contract disease the male usually goes forth scot free, whereas the female transgressor sooner or later conceives. After conception she either becomes a criminal or an outcast.

Even though society would treat the male transgressor as severely as it treats the female, there would still be a different standard, since society could not often know which males had fallen from grace. Therefore we must look upon *instinct* and *pregnancy* as two scientific reasons for the double standard in sexual matters.

We can not with Secretary Daniels say, "The *lie* that has lived so long must be driven out by the truth", since we honestly believe there are even more reasons than those given above for the double stand-

ard. But because we recognize the truth we are none the less in accord with all earnest advocates for continence in single men. Such continence, however, is not to be obtained by flowery speeches nor by varnishing over the truth, but only by action along sociological and economical as well as moral lines and rather by control of immorality in women than in men. Not control of immorality by municipal governments, abolishing the red light districts and other ordinances of that type, but the saving of girls before they fall.

This can only be done by truthful sex-education, by a living wage for young men and women based on the modern cost of living and not the cost of living a hundred years ago, by dissemination of knowledge of preventives, and finally by much more drastic punishment of seducers and white slavers than we now have.—W. T. B.

CASES OF PNEUMONIA SHOULD BE REPORTED AND QUARANTINED.

In view of these facts it is clear that a vigorous public health campaign must be directed by communities against the ravages of lobar pneumonia. Some health departments have already taken a forward step in declaring lobar pneumonia a reportable disease, like measles and scarlet fever, requiring visitation by the health departments to insure quarantine. This is a new idea for most people. There are, undoubtedly, millions of persons in the country who would not go into a house where there was measles, scarlet fever, whooping-cough or diphtheria, but who would not hesitate to go into a sick room where there was a case of acute lobar pneumonia. Nevertheless, the best medical authorities have shown that this disease is extremely infectious, and that those who are stricken with it have a worse chance of recovering than if they had any of the infectious diseases mentioned.

More states and cities should require that physicians report every case of lobar pneumonia and must enforce this requirement. Communities can also help by checking the nasty habit of spitting in public places, which is probably the most fruitful method of spreading the germ of pneumonia.

The form of pneumonia known as broncho-pneumonia is also a serious factor in the death rate, especially of young children; but

must not be confused with the infectious disease which health departments are now taking steps to quarantine.

EVERY DOCTOR IN THE MEDICAL RESERVE CORPS.

What an ideal situation it would be, if every doctor in the United States who is mentally, physically and morally fit, was in this corps.

The time is coming, and in the immediate future, when the Medical Reserve Corps of the Army must be immensely augmented, and so as to enable the Surgeon General to have at his command for immediate assignment, as conditions demand, a sufficient number of trained medical officers, let us take the above thought seriously.

We all know, from past history, the conserving value of an efficient medical corps, and this means number, as well as training.

A statement made by one high in authority in the Surgeon General's Office, "that our fighting forces would be decimated by sickness and casualties in six months, were it not for an efficient Army Medical Corps," clearly emphasizes the importance of every doctor in the United States, meeting the requirements above referred to, accepting a commission in the Medical Reserve Corps of the United States Army.

The struggle in which we are now engaged, and for which we are preparing to take such a prominent part, depends for its success as much upon the medical profession, as it does upon our combatant forces, and while we do not know that any such intention as herein suggested is in the mind of the Surgeon General, it would at least give him the necessary corps of medical officers upon which to draw and thus serve the best interests of our country and the best interests of the medical officer serving.

FROM THE PRESIDENT'S MESSAGE.

"Let there be no misunderstanding. Our present and immediate task is to win the war, and nothing shall turn us aside from it until it is accomplished. Every power and resource we possess, whether of men, of money, or of material, is being devoted and will continue to be devoted to that purpose until it is achieved. . . .

"We shall regard the war as won only when the German people say to us, through properly accredited representatives, that they are ready to agree to a settlement based upon justice and the reparation of the wrongs their rulers have done. . . .

"When this intolerable Thing, this German power, is, indeed, defeated and the time come that we can discuss peace—when the German people have spokesmen whose words we can believe and when those spokesmen are ready in the name of their people to accept the common judgment of the nations as to what shall henceforth be the bases of law and of covenant for the life of the world—we shall be willing and glad to pay the full price for peace and pay it ungrudgingly. We know what that price will be. It will be full, impartial justice—justice done at every point and to every nation that the final settlement must affect, our enemies as well as our friends."

Bennett Medical College and the Chicago College of Medicine and Surgery are now combined to form the medical department of Loyola University of Chicago. The purchase of the buildings and equipment of the Chicago College was made by Loyola University officials.

Dr. Lawrence Ryan is dean of the new faculty of the school; Dr. Alfred de Roulet is junior dean; Dr. G. E. Wyneken is secretary; Rev. H. S. Spalding, S. J., is regent.

The college is on Lincoln Street, opposite Cook County hospital, in the medical center of the west. The institution comprises five buildings.

Work will be carried on at the college on the highest plane possible to meet requirements of all states.

Clinical work at the school is taken care of by men who are prominent in the medical profession. Requirements of the school for medical students call for one year of college work before entering.

OUR SAVINGS AND OUR ARMY.

"Our gallant men in the field will do the fighting with true American valor, but the responsibility rests upon you and me and every other citizen of the United States who is not in active field service

to provide them with the equipment and machines to enable them to fight successfully.

"Valor alone is not going to destroy the Kaiser and military despotism. We must have organization back of it. Every man in this country must be a patriot. . . .

"The value of the war-savings plan consists not alone in the amount of money which the people of the United States may lend to their government upon the certificates which are sold, but also in the lesson which will be taught, in the habits of thrift that will be inculcated as a result of it. What this will mean in conserving the resources of America is inestimable. What this will mean in the future economy of America is incalculable.

"Victory can only be won by the valor of our soldiers, combined with the intelligent use of our resources. Savings and economy enlarge the available resources of the country for war, and the industry of the people is necessary to put these resources in the form which will enable our soldiers to use them with victorious effect upon the battle fronts."—From speech of Secretary McAdoo.

WAR PRICES DEPRIVING BABIES OF MILK.

Washington, D. C., Dec. —Decreases reported from New York and Chicago and New England cities in the amount of milk being consumed by families with young children have led the Federal Children's Bureau to emphasize its imperative necessity in the diet of babies and young children.

Dr. Grace L. Meigs, the Director of the Bureau's Child Hygiene Division, in commenting on the danger of such a decrease to the health of children today, said, "Milk is the one food that all young children must have if they are to be strong and healthy. Whole milk is rich in the elements without which the child's growth ceases and his health is impaired; indeed there is no food which can supply as well the needs of the growing child.

"There is no substitute for milk in the diet of babies and young children. Yet the increase in its price is so startling that, as the reports the Bureau receives show, many mothers are economizing on milk. Young children can not get the nourishment they require

form the would be milk substitutes given them. Patent foods which do not themselves contain milk and are not intended to be mixed with milk are so lacking in the essentials of health development that we must expect children fed on them instead of on milk to be weakly and ailing. Plainly very great harm is done young children by giving them tea and coffee to take the place of milk which is really a complete food; it is giving them mere stimulants to replace their best food."

Since the price of milk went up to 14 cents a quart, tea and coffee have been substituted for milk by more than half of the 2,200 families—all with children under six—included in the study of the effect of the increased price of milk just made in New York City by the Mayor's Committee on Milk, the City Department of Health and the Association for Improving the Condition of the Poor. One hundred and twenty families have stopped taking milk entirely, in 25 of these there are babies under one year old. All the 2,200 families have young children, but nearly half are taking from one-fourth to one-half less than before the price went up. Yet even before the larger price decreased the amount of milk they bought these families were getting but little more than half the amount of milk which experts on children's diets say they need.

In Chicago as well as New York the rise in the price of milk has forced down the amount purchased. A dealer there reports that while he distributed on an average 4,000 quarts of milk a day in September, on October 3 with the price increased, he distributed only 2,500 quarts.

In New Haven, Bridgeport and other Connecticut towns milk delivered at the station is sold wholesale at 8 cents a quart. It retails as high as 15 cents a quart. In Waterbury, when the price was raised from 12 to 15 cents a quart the sale was so greatly reduced that the price has been dropped back to 14 cents.

We beg to call the attention of our friends to the statements of dues for subscription sent out with this issue and to ask a reply as to whether the subscription to the Journal is to be continued or not. Responses will be highly appreciated as we wish to revise the mail-

ing list for the coming year. To every one of our readers we extend our wishes for a happy and a prosperous New Year.

Obituary

Dr. A. G. Donoho, Sr., of Hartsville, Tenn., died at his home in that place November 22d, at the age of 79 years. Thus passed into the great beyond one of the most striking figures in the old guard of the medical profession of the State. A veteran of the civil war, a practitioner of many years standing and a respected citizen of the community in which he lived, he went down to his death beloved and revered by all who knew him and his memory will always be held green and loving by all who came in contact with him. His career was like that of the old Dr. McClure made famous by the pen of Barrie, for no hardship deterred, no difficulties were shunned and no question of gain stood in the way of doing his professional duty. We who pay this humble and imperfect tribute knew him and loved him.

Reviews and Book Notices

Annual Report of the Surgeon General of the Public Health Service of the United States. For the Fiscal Year 1916. Washington, Government Printing Office, 1916.

Our thanks are due the office of the Surgeon General for a copy of this exceedingly valuable report. This is the forty-fifth annual report of the service and covers the one hundredth and eighteenth year of its existence. It contains a great deal of interest to the practitioner, especially the parts relating to the investigation of pellagra, hookworm disease, filiarisis, typhoid and typhus fever. The statistical information contained in this report is of the greatest value. The make up and arrangement is admirable as are all work of this kind put forth by the United States Government.

Publisher's Department

THE TREATMENT OF EPILEPSY.

In the treatment of epilepsy the employment of the bromides is of such universal acceptance that the main point involved is the choice of a bromide preparation that will subject the patient to a minimum of the evil effects of the bromides.

Many physicians have shown that the best preparation to use for this purpose, one that has a maximum of therapeutic potency and productive of a minimum of the gastric disturbances so frequent in the long continued use of bromides, is BROMIDIA (Battle). This superiority of (BROMIDIA (Battle) is due to the choosing of pure drugs and the employment of the utmost care and skill in compounding it.

BROMIDIA (Battle) may be continued for long periods, a feature that gives it pre-eminence in the treatment of epilepsy.

BUILDING UP AFTER PNEUMONIA.

Every physician recognized that one of the most important things in the management of a case of pneumonia is building up the patient after the resolution of the inflammatory process. For this purpose Cord. Ext. Ol. Morrhuæ Comp. (Hagee) has been found of great dependable worth, owing to the certainty with which it charges the reduced tissue with the necessary reconstructed elements. It is a most rational therapeutic procedure to put the pneumonia patient on Cord. Ext. Ol. Morrhuæ Comp. (Hagee) for by so doing the period of convalescence is shortened and the patient is restored to his normal vigor all the more quickly. The advantage of using Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is that while it possesses every remedial and nutritive quality of the plain oil, it inflicts no burden on the gastric apparatus, hence it may be given for an indefinite length of time without causing distress.

AFTER AN ALBOHOLIC DEBAUCH.

The physician is often called upon for relief of the marked nervous disturbance following a prolonged indulgence in alcoholic liquors. The nervous system is badly upset, the stomach is disturbed and the patient is unable to perform his usual duties. In the relief of this state PASADYNE (Daniel) shows its advantage in a high degree. Possessing marked sedative properties it quickly and safely secures for the patient the rest needed and restores the nervous system to its wonted equilibrium. It may be pushed without fear of producing a depressing reaction, and its therapeutic potency insures accomplishment of the prime purpose of its administration.

PASADYNE (Daniel) is a concentrated tincture of *passiflora incarnata*, and is a calamative of the highest order. It is of particular value in women.

A sample bottle may be obtained by addressing the laboratory of John B. Daniel, Inc., Atlanta, Ga.

THE GREAT AMERICAN HABIT.

"The great American habit" said a prominent physician a short time ago, "is neither rapid eating, nor dining 'too wisely and well.' These are evils, to be sure, but the one great habit to which most American are addicted is the routine use of laxatives and cathartics. Is it any wonder some European doctor has said we are a nation of constipationists! Why, physic has become only a little less necessary than the oxygen we breathe."

How true all this is, most physicians of broad experience will readily agree. Physic the first thing in the morning, physic before or after each meal, and physic the last thing at night! And only one purpose throughout, to move the bowels! Never a thought in regard to regulating them.

This is the pity of the whole situation, for instead of getting relief and correcting constipation, the average person is simply becoming more and more a slave to the cathartic habit.

To a certain extent this is not surprising for the great majority of remedies are simply "movers" not "regulators."

It was recognition of this fact that led to the preparation of Prunoids. Here is a remedy that is much more than a physic. Used as the physician's judgment will dictate, according to the needs of each patient, Prunoids will not only move the bowels satisfactorily without the least griping or disagreeable effect but will so stimulate the physiologic processes of the intestinal tract that evacuations will become natural and regular.

It is the notable efficacy of Prunoids in correctly intestinal torpidity and restoring functional activity of the bowels that has led so many physicians to prefer this remedy to all others for the relief and permanent correction of chronic constipation. They have learned that the use of Prunoids offers a means not alone of correcting constipation, but what is especially gratifying, of curing "the great American habit."

THE MOST EFFECTIVE THERAPEUTIC REMEDY FOR NERVOUS DISEASES.

In the treatment of many nervous diseases it not infrequently happens that the after-effects, or sequelae of the remedy are worse than the disease. This statement applies in particular to the bromides in the forms commonly employed. Valuable and effective as they are whenever a sedative or anti-spasmodic is needed, they must be prescribed with the utmost care and discretion, else the results, to put it mildly may be unfortunate in the extreme.

The physician therefore, can not be too critical and cautious in selecting the preparation of the bromides he uses, especially if it must be given for any considerable period. Many men know the advantages of Peacock's Bromides but to those who do not it should be pointed out that this high grade product easily stands at the head of available bromide preparations not only in freedom from objectionable effects but also in therapeutic efficiency.

Extended clinical experience has shown that owing to the purity and quality of the constituent salts, this combination does not upset the organs of digestion nor give rise to the highly disagreeable condition known as bromism.

Physicians who use Peacock's Bromides know the satisfaction of accomplishing not only the results they seek, but without creating any disagreeable and annoying conditions which call for explanation and excuse.

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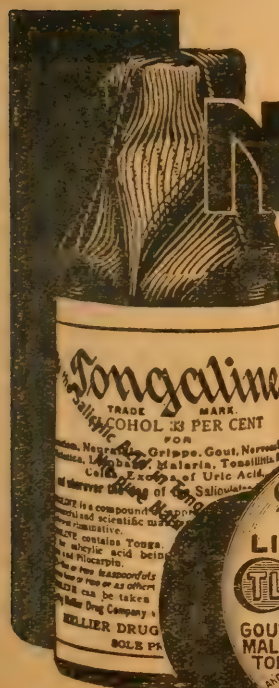
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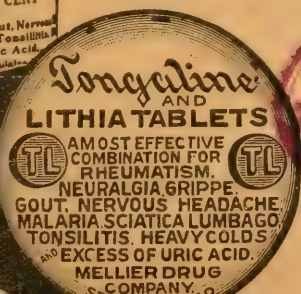
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